

N.E.O.S.C.I.A. - Executive

President:

Dan Cook. (705) 272-3964

Secretary/Treasurer:

Neil Tarlton. (705) 692-7276

Ontario Soil & Crop Association Regional Director

Algoma, Manitoulin, Sudbury, Nipissing,
Parry Sound, Muskoka, Cochrane, Temiskaming:
Mack Emiry (705) 865-2249

District Soil & Crop Assoc. Contacts

Algoma:

Harold Stewart. (705) 842-0392

Cochrane:

Adrian Struyk. (705) 272-5672

Manitoulin:

Marca Williamson (705) 859-2528
wfarms@amtelcom.net

Muskoka:

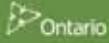
Ken Pearcey (705) 385-2844
Nipissing West/Sudbury East:

Steven Roberge. (705) 594-9370
Parry Sound/Nipissing East:

Klaus Wand. (705) 724-2314
Sudbury West:

James Found. (705) 969-4597
Temiskaming:

Sheila Randell (705)-647-7195
tccorg@hotmail.ca



Northern Ontario Regional Office

Ministry of Agriculture, Food and Rural Affairs
P.O. Box 521, Hwy. 64
Caldwell Township Building, Verner, ON P0H 2M0
TOLL FREE / General Inquiry 877-424-1300
FAX (705) 594-9675
firstname.lastname@ontario.ca

Regional Manager, Northern Ontario
Monique Legault

Client Service Representative
Gisèle St. George & Monique Roberge

Agriculture Development Advisor (North Region)
Julie Poirier Mensinga

Agriculture Development Advisor
(Nipissing, Parry Sound & Sudbury East)
Pierrette Desrochers

THESSALON

1 Collver Rd., RR #1, Thessalon, ON P0R 1L0
Agriculture Development Advisor
(Algoma) Dave Trivers

GORE BAY

Box 328, 35 Meredith St., Gore Bay, ON P0P 1H0
Agriculture Development Advisor
(Manitoulin and West Sudbury) Brian Bell

NEW LISKEARD

Box 6008, 280 Armstrong St., New Liskeard, ON P0J 1P0
Agriculture Development Advisor
(Temiskaming and Cochrane) Daniel Tassé
Agriculture Development Advisor
(North Region) Barry Potter
Beef Cattle Production Systems
Program Lead Tom Hamilton

Breaking Ground

(in Northeastern Ontario) Winter 14/15

A Publication of the North Eastern Ontario Soil & Crop Improvement Association (NEOSCIA)

Evaluating the 2014 Harvest

By Graham Gamble, RCC (Based on files from Terry Philipp, CCA)



This photo pretty much sums up a disappointing season in Earlton and across much of the North. A quick incorporation follows a thorough mulching of a corn field. Some farmers say that this is the first year in four decades that they have been unable to harvest some crops. An optimist with a positive spin would suggest that this is one way to increase soil organic matter!

The Temiskaming harvest was quite disappointing this year, and unlike last year when insect problems were big news, the issue in 2014 was strictly weather related. A "traditional" winter held spring off by 2 to 3 weeks, but planting was completed on most farms. Unfortunately, the high temperatures that are normally associated with June and July never showed up! Despite this, the mood was upbeat during the mid-July field tours hosted by local farms and the Temiskaming Crop Coalition.

Early August did provide a dry period for harvest, but the trend toward rain was soon initiated, and the whole situation went steadily downhill until the snow fell and stayed in early November. Canola had been hard hit by Swede Midge in 2013, and this year trials were underway to evaluate protective measures across Ontario. In Temiskaming, only about half of the test area was harvested, but harvest in the south was more successful. The Ontario Canola Growers Association hope to have Provincial results available in the new year.

As for other crops, Spring Wheat was good very early on, but the longer it stayed in the fields, the lower the Falling Number went until most samples were classified as feed. (This is provided that the Vomitoxin levels aren't too high!) Barley also had Vomitoxin issues,



This newsletter is published 4 times per year. Articles can be submitted in either English or French and should be submitted to the Communication Coordinator (see below). Please supply translation, if available.

Material in this newsletter is based upon factual information believed to be accurate. Action taken as a result of this information is solely the responsibility of the user. We reserve the right to edit articles.

Send articles to:
Graham Gamble
Box 586, Temiskaming Shores, ON P0J 1K0
Tel: (705) 672-3105
Fax: (705) 672-5959
E-Mail: gamblesgraham@yahoo.ca

Continued on page 13

Go to GeoVisage, <http://geovisage.nipissingu.ca> for Current and Historical Weather Data

*Temiskaming Crops
Coalition (TCC)*

a partnership of:

Temiskaming Soil & Crop
Improvement Association

N.E. Ontario
Wheat Growers

Temiskaming
Grain Growers

SUPPORTING TEMISKAMING FARMERS



TEMISKAMING CROPS COALITION & GRAIN FARMERS NORTH 15

ANNUAL MEETING & LUNCHEON

January 16, 2015
Riverside Place, New Liskeard, ON

9:30 a.m. to 12:00 p.m. - GFO Presentation

12:00 p.m. to 1:00 p.m. - Lunch

1:00 p.m. to 3:00 p.m. - Various Agricultural Speakers

Annual Membership Fee Required
- \$20.00 (*includes lunch*)

For more information, please contact:

Dennis Jibb (TCC President)

705-563-2881

Kevin Runnalls (GFO Rep.)

705-622-1870

Premier's Award for Agri-Food Innovation Excellence

Leaders in Innovation

Northern Ontario and Russia have more in common than just long, cold winters. They also have alpha vodka. In the town of Hearst, Rheault Distillery uses a recipe from the Romanov Empire to create a quadruple-distilled wheat-based alcohol. And while the distillery won't give away all its secrets, it will reveal its use of milk in its final stage of distillation. The result is a smooth, subtle taste with a silky finish. Rheault believes northern wheat is particularly well suited to vodka production: the long hours of summer daylight create a grain with higher sugar content. With LCBO sales growing rapidly this year, the small-batch artisan distillery is creating a new market for local wheat producers - and a taste of Russia half a world away.



Minister Jeff Leal, Marcel Rheault, Mireille Morin, Premier Wynne

A Bioenergy Update

by Ambrose Raftis, President, Green Timiskaming.

Bioenergy Economy educational seminar was put on by the Biomass Innovation (BIC) Centre in North Bay's Nipissing University and was presented by Dawn Lamb and Jeff Borisko. New or relevant information include:

- the development of a combustor by Volter Finnish that produces 30 kw electricity and 80 kw of heat, enough for a couple of homes. One is being delivered to Timmins resort
- A non-steam Rankin Cycle) combined heat and power (CHP) is available that used silicone to drive the turbine that produces electricity. It is known as the most reliable and safest small CHP systems in the 1 meg scale. These are Austrian or German and were not represented at the session. The ORC CHP would appear to be the most tailored technology for small town FIT CHP and should be investigated further.
- There are many high value biochemicals available in wood that have market demand. The lowest value is the combustion of wood. When technology advances the optimum values will be derived from a bioprocess as the initial activity followed by combustion.
- The BIC is interested in supporting a couple of Bio economy Regional Assessments. This would include the assessment of the potential for bioenergy development with the ultimate aim of having an operator manage and distribute the material. This would be a supporting research to back a request for a long term commitment from the MNR for biomass supply.

The Conference Key Points

Biomass.. The Northern Pipeline

Ontario is harvesting less than half of the sustainable cut level of the province due to the slowdown in the housing market which was our key focus. Many companies and government agencies are working to develop processes that can use the wood components as replacement for chemicals now derived from the fossil fuels. There is a growing market for these chemicals

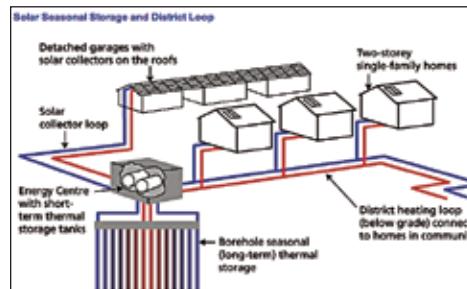
and active areas for refinement look to be the Sault Ste Marie area for extraction and the Sarnia area for refinement. There is some market based activity but mostly research is the driver.

Big Data and Smart Cities

Paul Beach the Manager of the Geomatics Centre detailed how they have mapped every service feature of their city on visual data maps that locate further information spatially. This information (water, sewers, electrical, communication, and gas) allow citizens to get targeted information and protection in the event of a service failure. Sault Ste Marie is a leader in integrated mapping of services and as a result have played a role in bringing this technology to other cities.

Advanced Technologies

Ground Storage: Bill Wong was the Leidos project engineer with the Okotos Solar district energy system. The key feature of the projects is a year-around heat storage that allows solar heat from the summer to be kept and used over the winter months. The storage is geothermal using a series of looped pipes in 35 meter deep drilled wells. The wells are drilled in concentric circles allowing the core to retain heat with temperature levels of up to 75 degrees Celsius. The flow that puts the heat in the core in the summer is simply reversed in the winter when heat is needed. This project has been in operation for 7 years and functions effectively with a growing core temperature throughout the yearly cycle.



Solar Panel: Martin Pochtaruk principal of Heliene a manufacturer of Solar panels in the Sault introduced his company and

the challenges in the current market since the government removed the provincial content requirement. We should check out price and availability when purchasing our panels.

Smart Grid: Speakers Craig Rizzo Leidos Engineering discussed the integration of energy flow and the efficiency it allowed the consumer. In effect consumers became producers as well feeding energy into the system at times it was required and taking it when system excess occurred. The efficiency would result from the decreased cost of stand by capacity as well as the reduced long distance movement of power. In addition the ability of communities to island could reduce down time of networks that is growing on our aging distribution systems. They suggested that communities might start by having protected areas fed with power from community sources. Currently due to technical restrictions islanding is not allowed on network connections. Isolated communities not connected to the grid are the only ones that are allowed to island.

Funding and Finance

Northern Heritage Fund, through the former Sault Ste Marie EDO Bruce Strapp now Executive Director of NOHF, talked of the support that they have supplied to the renewable energy sector. Much but not all of the funds are directed through a municipally owned company. In discussions it was acknowledged there was \$22M of government funding supplied for a \$30M solar farm that the city now owns. As a result the city will be earning \$3-4 M per year after payback in 2-3 years. Pay back to the community for one 10 Meg Solar farm will be in the range \$60M.

Funding of community energy projects with the support of the municipality should now be available using Infrastructure Ontario financing. This will drop the huge cost of capital and make projects once thought to be uneconomical to be profitable.



CROP TALK

OMAFRA Field Crop Specialists – Your Crop Info Source

Ministry of Agriculture and Food, Ministry of Rural Affairs, Crop Technology Branch

Agricultural Information Contact Centre: 1-877-424-1300
Publication Order Centre: 1-888-466-2372

Northern Ontario Regional Office: 1-800-461-6132
OMAFRA Web Site: www.omafra.gov.on.ca

Table of Contents

1. P and K Considerations In Corn
2. New "Cashcropper" App for Crop Rotations
3. Does Forage Variety Testing Have A Future?
4. Winterkill From Manure Application
5. Sustainability In Your Future?

**Follow Us On Twitter and
FieldCropNews.com !**

**Current field crop information
as it happens!**
@onfieldcrops

Brought to You by the Following OMAF and MRA Crop Specialists

Bonnie Ball, Soil Fertility Specialist
Scott Banks, Emerging Crops Specialist
Tracey Baute, Field Crop Entomologist
Horst Bohner, Soybean Specialist
Christine Brown, Nutrient Management Program Lead
Mike Cowbrough, Weed Management Program Lead
Brian Hall, Canola & Edible Beans Specialist
Adam Hayes, Soil Management Specialist - Field Crops
Peter Johnson, Cereals Specialist
Jack Kyle, Graizer Specialist
Ian McDonald, Applied Research Coordinator
Gilles Quesnel, Field Crops, IPM Program Lead
Greg Stewart, Corn Industry Program Lead
Albert Tenuta, Field Crop Pathologist
Dawn Pate, Manager

Editor: Joel Bagg, Forage Specialist
Compiled by: Paula DeShane

P and K Considerations In Corn

Greg Stewart, Corn Specialist, OMAFRA and K. Janovicek, University of Guelph

With the recent decline of corn prices, there is renewed interest in maximizing return on your fertilizer dollar. Recent phosphorus (P) and potassium (K) research for corn conducted by OMAFRA and the University of Guelph reveal some strategies.

Phosphorus - Band vs. Broadcast

Band applying phosphorus is more likely to result in profitable corn yield increases when compared to the same amount broadcasted.

A review of Ontario research trials indicated that applying 50-70 kg/ha (45-62 lbs/acre) P_2O_5 in a 5 cm X 5 cm (2 in. X 2 in.) band had average yield increases that were 3 times higher when compared to broadcast applied P (Table 1). In fact, only banded P when applied at rates between 50 and 70 kg/ha P_2O_5 resulted in yield increases that on average were profitable. When profit margins are tight growers should make every effort to band P close to the row rather than broadcast. In some cases, low soil test P (i.e. less than 8 ppm) may make broadcasting P necessary.

Table 1. Average grain corn yield and profit response to broadcast and 2X2 band applied P from Ontario research trials. The average P_2O_5 application rate was 60 kg/ha (54 lb/ac) P_2O_5 , with a range between 50 to 70 kg/ha (55-62 lbs/ac) P_2O_5 .

Application Method	Yield Increase	Return Increase	Yield Increase	Profit Increase
	tonne/ha	\$/ha	bu/ac	\$/ac
Broadcast	0.22	- 47	3.5	-19
Banded	0.61	22	9.7	9

Note: Return calculations are based on corn price of \$177/ha (\$4.50/bu) and MAP (mono-ammonium phosphate) cost of \$1.43/kg (\$0.65/lb) P_2O_5 . Potassium - Band vs. Broadcast

Continued on page 5



Ministry of Agriculture
and Food

Ministry of Rural Affairs



P and K Considerations In Corn

Continued from page 4

Including K in starter fertilizers can result in profitable corn grain yield increases, especially when soil test K levels are less than 90 ppm.

Table 2 contains data from Ontario research trials that evaluated corn grain yield response to various starter fertilizers. When soil-test K levels were less than 90 ppm and no broadcast K was applied, applying a MAP/potash blend in a 5 cm x 5cm (2 in. x 2 in.) starter band increased corn yields significantly. In these same circumstances, seed placed liquid fertilizers that also contain a small amount of K can be expected to produce higher corn yields than where no starter fertilizer is used or where starter fertilizers contain P only. On these lower testing soils, when K is broadcast prior to planting (fall or spring) yields are improved significantly by the broadcast K and the magnitude of the yield response due to the starters is reduced (Refer to Table 2).

The data generally indicates that broadcasting K on the lower testing soils is

advised, but in situations where land tenure is in question and broadcasting a significant amount of K to build soil tests is risky, a grower who has the capability to band dry fertilizer P and K blends can generate yields equivalent to other options.

On higher testing soils, the size of the yield responses to any applied K is much less. However, some of the same trends are observed. Some K in a starter band can improve yields, but generally the advantage to higher K rates in dry 5 cm X 5 cm (2 in. X 2 in.) bands compared to lower in-furrow rates is marginal.

If broadcast K is to be applied either in the fall or spring prior to corn planting the need for K in the starter is significantly reduced unless soils tests are low (i.e. less than 61 ppm). In these low testing situations, broadcasting to build soil test and banding to help meet the immediate crop requirements are likely both profitable

Table 2. Impact of broadcast K applications and various starter fertilizer options on corn

Soil Test K (ppm)	Starter Fertilizer	No Broadcast K		Broadcast K	
		Bu/ac	Tonnes/ha	Bu/ac	Tonnes/ha
< 90	none	120	7.6	156	9.8
	6-24-6 (liquid in furrow)	139	8.7	158	9.9
	P and K (dry in 2x2 band)	168	10.4	166	10.5
> 90	none	176	11.0	186	11.7
	6-24-6 (liquid in furrow)	186	11.7	192	12.0
	P and K (dry in 2x2 band)	190	10.9	195	12.2

6-24-6 applied at 47 litres/ha (5 gal/acre);

P and K applied at rates of 35-62 kg/ha (31-55 lbs/ac) of P₂O₅ and K₂O each in a blend.

Soil test averages for sites in the < 90 group averaged 71 PPM K and 21 PPM P

Soil test averages for sites in the > 90 group averaged 122 PPM K and 27 PPM P

New “Cashcropper” App for Crop Rotations

*Mike Cowbrough, Weed Specialist,
OMAFRA*

Crop prices are certainly more bearish now than they have been over the past two seasons. Some farmers question whether they should tweak their cropping rotation in the short term or stay the course. Now there is a smartphone app, called “cashcropper” that will help you to evaluate:

1. The monetary value that different crop rotations bring to your operation.
2. How much phosphorus and potassium is being removed from the soil by each crop in a rotation
3. How much nitrogen is required to reach anticipated grain yield in each crop.

The Cashcropper app (www.cashcropper.ca) allows Ontario grain growers to compare the net profitability and fertility requirements for different crop rotations within a given field. This app is powered by over 30 years of rotational yield response data from the University of Guelph. It takes into account the user's location, soil type and tillage practices for corn, soybeans and wheat. The real costs of "yield driven" nutrient removal for each crop is included in the calculation. The app is pre-loaded with default OMAFRA yield values by county and township as well as input costs. Users can input their own data to assess real and hypothetical rotation decisions.

This app was made possible with the help and expertise of Dr. Bill Deen and Ken Janovicek from the Department of Plant Agriculture, University of Guelph, and the financial support of the Agri-Food and Rural Link (an OMAFRA and University of Guelph partnership) and the Grain Farmers of Ontario.

Download the app at:
www.cashcropper.ca

Continued on page 8

Does Forage Variety Testing Have A Future?

Joel Bagg, Forage Specialist, OMAFRA

Many of you are familiar with the forage variety performance brochure published annually by the Ontario Forage Crops Committee (OFCC). (www.goforages.ca) Due to recent changes to the Seeds Act, new support from producer organizations and seed companies will be needed for this third-party variety information to be available in the immediate future.

Farmers want top yielding varieties, but they also want assurance that registered perennial forage varieties are adapted to Ontario conditions and have adequate persistence. The forage variety brochure was developed each year since 1955 based on data from independent variety trials at various Ontario locations, including Elora, Kemptville, New Liskeard and Thunder Bay. As of this year, this type of official registration trial data and recommendations for forage variety registration is no longer required by the Canadian Food Inspection Agency.



The OFCC has proposed to continue performance testing of alfalfa varieties in the spring of 2015 on a voluntary, fee-for-service basis. Head-to-head data for individual sites will be publically available. Similar forage variety performance tests were offered to the industry in 2013 and 2014, but insufficient entries were received to seed the trials. In order for this proposal to succeed, sufficient varieties for head-to-head tests will need to be entered by the cooperating seed companies. In addition to entry fees paid by the companies, some funding will be required from farm organizations to help cover expenses. Seed companies respond to the needs of their customers. If there is insufficient interest by their farmer customers, seed companies are unlikely to participate.

For more information or suggestions on how to make this proposal succeed, contact me (joel.bagg@ontario.ca) or Jim Johnston, OFCC Chair (wcook@ntl.sympatico.ca).

Winterkill From Manure Application

Christine Brown, Nutrient Management Lead—Field Crops, OMAFRA

Manure applied to wheat crops or to forage crops can be an excellent option, but not in winter on frozen soils.

Manure application in winter should not ever be part of a manure management plan. Rather, it should be part of a contingency plan, because we all know that weather happens. Frequent rain and a late corn harvest is taxing manure storage capacities on many farms in 2014. Contingency plans are essential for manure that must be applied in less than ideal conditions. A forage or wheat field can be an ideal site for contingency plan manure application, because compaction should not be an issue, and the soil cover would help prevent nutrient runoff and erosion. Forage or wheat fields are ideal for those reasons. However, winter kill becomes a much greater risk, especially with application of liquid manure. Why? Beside the common risks that include, compaction from wheel traffic, and crown damage; manure contains salts!

Salt Damage

Salinization, the concentration of salt in the root zone, is not an issue in Ontario. Ample precipitation and drainage leaches the salts through the soil profile. However, when the soil is frozen, infiltration can't occur. Salts in manure can then turn deadly. High sodium also has a negative effect on soil structure; making the soil more

susceptible to crusting, and further decreasing the capacity for infiltration.

Livestock manure contains many salts, including ammonium, calcium, magnesium, potassium and sodium. When accrued, they can be significant. Salt content varies from farm to farm based on livestock species, diet formulation and even the salt in the drinking water. Many manure analyses report "Total Salts" or electrical conductivity (EC) to reflect the accumulated salts. A typical hog manure (as applied basis) can have about 20 mS/cm (milliSiemens/cm) or about 125 lbs of total salts per 1,000 gallons. Dairy manure average is 14 mS/cm or about 90 lbs/1000 gallons. Sodium and magnesium chloride have a working temperatures to about -15° C; potassium chloride to -4° C, while calcium chloride can work to about -23° C.

When manure is applied on frozen or snow-covered soils, the salts melt the snow and ice at the soil surface. The layer below may still be frozen, preventing infiltration. The melted, saturated layer is high in salts, toxic to roots, and more prone to erosion and runoff, and more susceptible to frost heaving. All these risks are increased where manure with high EC or total salt contents has been applied.

Contingency Plan Options

When contingency plan applications become necessary during the winter season,

options include:

- Late summer application to forage crops after the final cut or at the beginning of the critical harvest period,
- Temporary storage at a neighbouring storage that has extra capacity,
- Application to forage fields or cover crops that will be tilled or killed,
- Application to the most level harvested fields, preferably with residue still present, furthest away from surface water, where application does not occur through water runs or "flow paths".

Sampling manure at the time of application should be standard practice. A manure analysis that includes total salts will help to determine the level



Figure 1 – Winter kill from manure application on frozen soils during the winter of 2013 was evident when compared to forage growth in areas where no manure was applied.

Sustainability In Your Future?

Ian McDonald, Applied Research Co-ordinator, OMAFRA

What a fall! The only thing good about it is that if we can get past stewing about the weather, it gives us time to think. Sustainability - we hear the word everywhere but what does it mean to you?

When we look to the future, things appear to be very good with lots of opportunities for agriculture. We can look at the yield projections for new genetics in our crops, and the increasing global demand for products of agriculture as food, feed and industrial feedstocks. Although the public doesn't understand farming, they are coming to realize how valuable we are. Technology will make work easier, more accurate and more effective. Wow, I can't wait!

However, we need to come back to sustainability. Sustainability in most people's minds has 3 major pillars - economic, environmental and social. These 3 pillars are dynamic. Although we tend to pay the most attention to economic sustainability, it will become more apparent in the future the need to manage the 3 pillars together.

Soil Health

One measure of agricultural sustainability is the elusive idea of soil health. What is it? Do I have it? How do I get it? Poor soil health leads to reduced productivity through erosion (loss in nutrients and soil), reduction in organic matter which reduces nutrient and water holding capacity, compaction, poor soil structure making it hard to get good seeding conditions and many other detrimental effects. In many cases we know what to do, but we just can't get ourselves there. A good analogy is human health. I don't think there is one of us that doesn't know we would be healthier if we exercised more and ate a healthier diet, but how many of us are doing it?

We know that complex crop rotations, the right amount of tillage, cover crops,

ground cover, proper fertility and the right amounts of water are critical to getting the most out of our crops. But how many of us are practicing what we know? In recent years we have seen an increase in primary tillage, such as plowing and discing. We often don't see fields left with a minimum of 30% crop residue to minimize top soil losses from wind and water erosion. More land and fence rows being cleared of trees. Crop rotations have become tighter with more corn and soybeans and less hay and wheat. Continuing with the health analogy - we need to remake our farm diet and exercise program to be truly sustainable.

Water

Genetics has taken production a long way, but at some point the soil resource is not going to be able to allow the genetic potential to express itself. In a conversation with Dr. Jerry Hatfield of USDA-NRCS Soil Tilth Lab in Ames Iowa last December, we discussed what the constraints are to achieving yield potential of current and future genetics. Jerry estimates that to achieve a sustainable 300 bu/ac level of production in the US corn belt, they are going to have to capture 5-8 more inch acres of rainfall, or retain this much in the system. Water is still the critical piece in crop production that we continue to take for granted. Big yields mean big needs for water, and at the right time. Despite the advances made in genetics, the scientific equation of $6 \text{ CO}_2 (\text{carbon dioxide}) + 6 \text{ H}_2\text{O} (\text{water}) \text{ molecules} = 1 \text{ CHO} (\text{carbohydrate}) \text{ molecule}$ is unchanged. Plants may have enhanced abilities to explore soil for more water through more robust root systems, or effectively shut down under low water conditions, or pollinate over a longer period of time, but they have not changed this fundamental equation.

Dr. Hatfield also suggested that climate im-

pact research suggests the future may be a series of wet springs, dry summers, and wet falls. Think about what the implications of that. Crops going into the ground under poor conditions and establishing poor shallow root systems will be followed by dry summers where these compromised root systems will struggle to access limited water. Wet falls will make harvest difficult, with further compaction and soil damage impacting next seasons crop.

SoilSmart 2015

What do we need to do to enhance our soil health to be resilient to climate change and optimize the yield potential of newly available genetics? If you want to have a better handle on this, I invite you to attend SoilSmart 2015. The FarmSmart Ag Conference is again offering a full day, in-depth workshop lead by Ray Archuleta of USDA-NRCS ,Greensboro NC. Ray, better known internationally as "The Soil Guy", is one of the most passionate people I have ever experienced. Ray will spend an entire day with us, along with US and Ontario farmers who have been profitably putting soil health strategies into action. Through lecture, demonstration, workshops, farmer panels and open Q&A sessions, we are going to get to the heart of what it takes to understand soil and soil health enhancing practices. We will be returning to the Manulife Sportsplex at RIM Park in Waterloo at 2100 University Ave. E. on Friday January 23rd, 2015. Keep up with the developing program at www.farmsmartconference.com .

There will be lots on soil health at the major conference events across the province, including the Southwest Ag Conference, FarmSmart, Grey-Bruce Farmers Week, Eastern Ontario Crops Conference, and the Innovative Farmers Conference. See you there!



New “Cashcropper” App for Crop Rotations

Continued from page 5

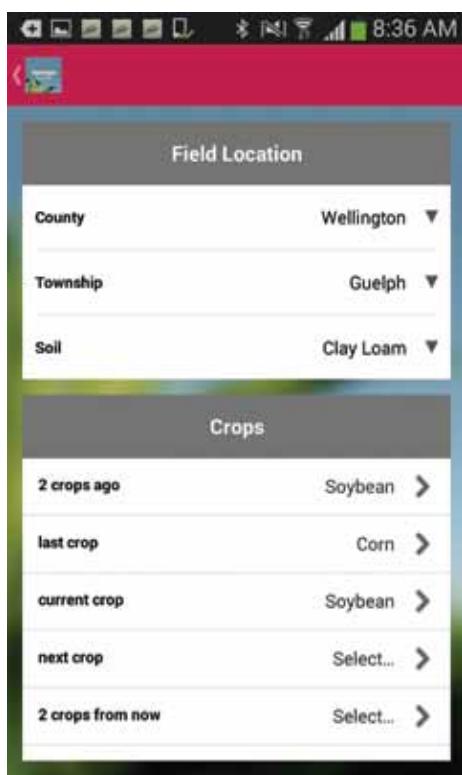
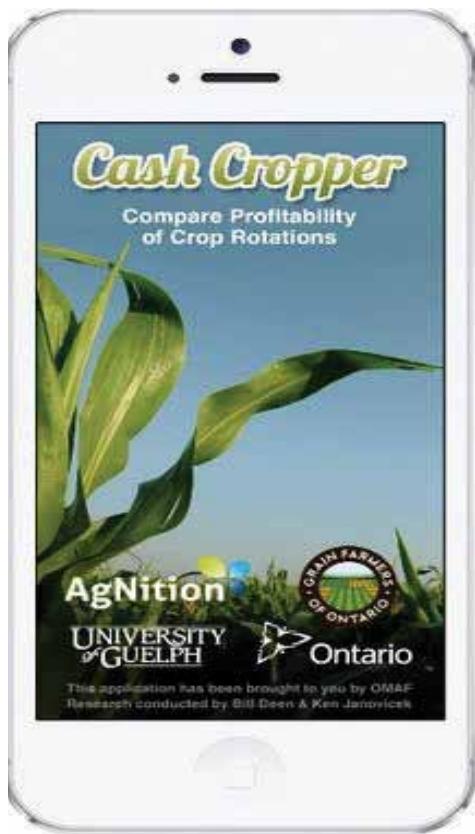


Figure 1 – User can create different crop rotations for a field that they farm.

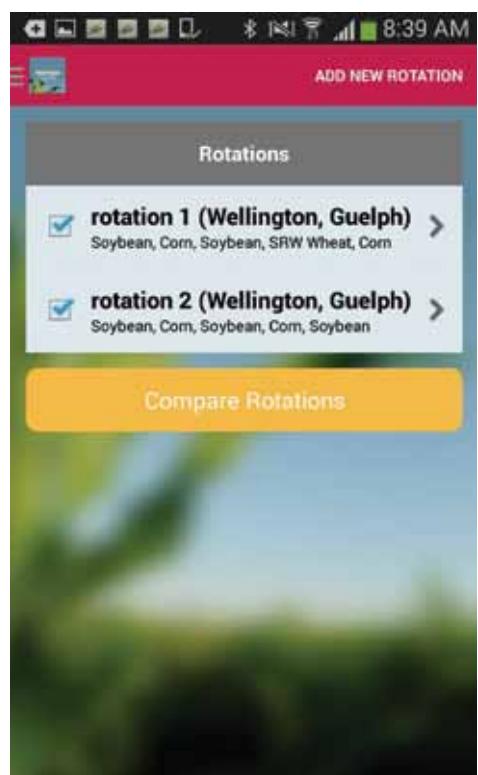


Figure 2- The user can select different crop rotations and compare their profitability.

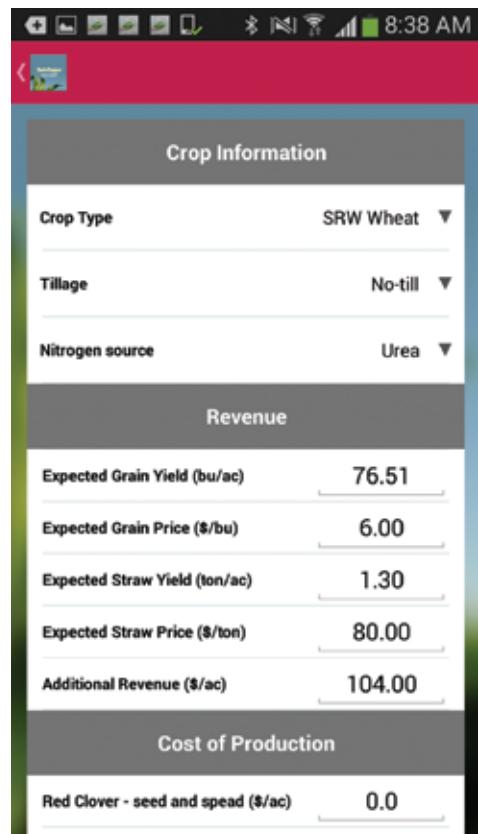


Figure 3 – Yield estimates and net profitability for each rotation are calculated using the information provided by the user and the long term crop rotation date.

	N Applied (lbs N/ac)	P Removal (P/ac)	K Removal (K/ac)	Total (\$/ac)
Soybean	0.00	32.76	54.60	47.50
SRW Wheat	75.33	45.14	27.54	92.43
Straw harvested	0.00	9.10	24.05	17.99
Corn	108.17	56.28	38.44	127.43
Totals	183.50	143.28	144.63	285.36
	N Applied (lbs N/ac)	P Removal (P/ac)	K Removal (K/ac)	Total (\$/ac)
Soybean	0.00	32.76	54.60	47.50
Corn	88.10	54.12	36.96	111.40
Soybean	0.00	32.76	54.60	47.50

Figure 4– Cashcropper also presents the nutrient removal and requirements for each crop in the rotation so that you can compare removal between two different crop rotations.



BULLETIN GRANDES CULTURES

14^e vol. 2^e édition

MAAO et MAR - des spécialistes en grandes cultures

juin 2014

Table des matières

1. Mise à jour sur les cultures de couverture et gestion automnale
2. Produire des veaux de boucherie de qualité à partir d'un pâturage de qualité
3. Gardez le canola dans votre rotation pour 2015!
4. Identification des moisissures de l'épi
5. Devez-vous utiliser des semences de maïs et de soya traitées avec des insecticides?

Préparé par:

Bonnie Ball, spécialiste de la fertilité du sol

Scott Banks, spécialiste des cultures émergentes

Tracey Baute, entomologiste, chargée de programme -grandes cultures

Horst Bohner, chef de programme, soya

Christine Brown, chargée de programme, gestion des éléments nutritifs des grandes cultures

Mike Cowbrough, chargée de programme, lutte contre les mauvaises herbes, grandes cultures

Brian Hall, spécialiste des récoltes de remplacement

Adam Hayes, spécialiste de la gestion des sols-grandes cultures

Peter Johnson, spécialiste des céréales

Jack Kyle, spécialiste des animaux de pâturage

Ian McDonald, coordonnateur de la recherche appliquée

Gilles Quesnel, spécialiste de la LIEG sur les grandes cultures

Helmut Speiser, ingénieur

Greg Stewart, spécialiste du maïs

Albert Tenuta, pathologue, chargé de programme grandes cultures

Éditeur: *Joel Bagg, spécialiste en culture fourragère*

Compilation: *Julie Gamache*

Mise à jour sur les cultures de couverture et gestion automnale

Adam Hayes, spécialiste de la gestion des sols, grandes cultures, MAAARO

Observations de cette saison

Cette année, des cultures de couverture ont été mises à l'essai dans de nombreux contextes : ensemencement intercalaire dans le maïs, semées par avion dans des cultures de soya, mises en terre après le maïs d'ensilage, après le blé d'automne et d'autres cultures. Dans la plupart des cas, l'humidité était amplement suffisante pour permettre la germination. Dans certains cas, l'excès d'humidité a ralenti la croissance et réduit la quantité d'azote disponible pour la culture de couverture. Par rapport aux quelques dernières années, le temps plus frais a réduit la croissance.

La gelée précoce de mi-septembre a endommagé les cultures de couverture sensibles. Cette gelée a tué le chanvre de Bengale, (une légumineuse de saison chaude incluse dans un mélange de six espèces pour le projet de sol et de cultures de couverture de la région de St Clair). On l'a également mis à l'essai dans certains secteurs au nord de London, avec un succès limité. Dans le mélange, le sorgho-soudan a également été tué ou sa croissance a été retardée dans de nombreux lots.

Ensemencement intercalaire dans le maïs

Le ray-grass annuel, le trèfle incarnat, le trèfle rouge et la luzerne se sont bien établis en ensemencement intercalaire dans le maïs au stade de cinq à six feuilles. Mis en terre plus tard, ils ne se sont pas établis ou ont formé des peuplements de mauvaise qualité. Les herbicides pour le maïs peuvent compromettre l'établissement de la culture de couverture. Les herbicides résiduels (atrazine, isoxaflutole + atrazine et s-métolachlor) endommagent le ray-grass annuel intercalé dans le maïs au stade de cinq à six feuilles.

Gestion automnale

Cet automne, il y a de nombreuses options de gestion des cultures de couverture. Le meilleur choix dépend du type de culture de couverture, du système de travail du sol et de la culture prévue pour l'année prochaine. L'une des principales fonctions des cultures de couverture est de protéger le sol, et idéalement elles devraient être laissées en place aussi longtemps que possible, de préférence jusqu'au printemps.

De nombreuses espèces employées à cette fin sont tuées par le froid. Le radis, l'avoine, le maïs, le soya, le sorgho-soudan, les pois et d'autres sont sensibles aux gelées meurtrières. Il suffit d'une température de - 5 °C pour tuer le radis.

Continued on page 10

Mise à jour sur les cultures de couverture et gestion automnale

Continued from page 9

D'autres espèces comme les céréales d'automne, le ray-grass annuel et les trèfles survivent à l'hiver. Si on souhaite ne pas avoir à tuer ces cultures au printemps, il faut les éliminer le plus tard possible en automne. Le labour en bandes est une option pour la préparation des lits de semence de la culture suivante. Il est généralement effectué en automne. Dans ce cas, réduisez l'opération au minimum pour les raisons suivantes :

1. il faut laisser assez de résidus pour protéger le sol pendant l'hiver;
2. un travail excessif annule tous les avantages pour le sol.

De nombreux producteurs ont cultivé avec succès du maïs sans travail du sol dans une couche non perturbée de résidus de cultures de couverture.

L'avantage du trèfle rouge

Si vous envisagez de semer une culture de couverture pour 2015 et que vous avez déjà semé du blé d'automne, n'oubliez pas le trèfle rouge. C'est encore la culture de couverture à privilégier parce qu'il présente les avantages suivants :

- son faible coût;
- on le sème au moment où on a le temps;
- il est facile à semer;
- il peut être couvert par l'assurance-récolte;
- il fournit un crédit d'azote de 80 kg/ha pour la culture de maïs à venir;
- il produit davantage de biomasse racinaire et aérienne que la plupart des autres cultures de couverture mises en terre après la récolte du blé.

Dans les parties du champ où il ne s'établit pas, il peut être remplacé par du trèfle incarnat. Si l'ensemble du peuplement de trèfle rouge est de mauvaise qualité, on peut encore mettre en terre une culture de couverture après l'enlèvement du blé.

Le moment de semer une culture de couverture peut ne pas arriver aussi tôt qu'on le souhaiterait, mais l'essentiel est de la semer. Selon les recherches de Laura Van Eerd, PhD, de l'Université de Guelph, campus de Ridgetown, il semble que l'élément critique soit la croissance racinaire et la présence d'une culture de couverture en général.

Le principal message à retenir, c'est qu'il faut semer tôt et souvent!

Produire des veaux de boucherie de qualité à partir d'un pâturage de qualité

Jack Kyle, spécialiste des herbivores, MAAARO

En 2014, les prix des veaux et des bovins d'engraissage ont été les plus élevés qu'on ait jamais connus; pour les producteurs vache-veau, c'est donc l'une des meilleures années de leur vie. Cette hausse des prix est l'occasion de prendre des décisions de gestion qui amélioreront la rentabilité de votre cheptel. Les acheteurs recherchent des bovins en santé à croissance facile qui commenceront à gagner du poids dès leur arrivée dans le nouvel élevage. La production de veaux plus sains et présentant une meilleure croissance, qui intéresseront les acheteurs, repose sur quatre principaux éléments, et la production d'un fourrage de qualité en est la pierre angulaire.

Vaccination, stimulateurs de croissance et génétique

Les vaches et les veaux vaccinés sont plus résistants. Consultez votre vétérinaire pour connaître le meilleur programme pour votre troupeau ET suivez-le intégralement. L'utilisation d'un stimulateur de croissance produira des veaux plus lourds, donc rapportant un meilleur prix de vente. Pensez à utiliser un stimulateur de croissance s'il convient au marché que vous vissez. Le père du troupeau fournit la moitié du patrimoine génétique des veaux que vous produisez. Recherchez les taureaux qui produisent des veaux d'un poids moyen à la naissance, mais dont la croissance et le développement sont excellents.

Qualité du fourrage

L'élément le plus décisif est l'amélioration de la qualité du fourrage que vous offrez à vos vaches et à vos veaux. Sans pâturage de qualité, vous ne profiterez pas des avantages que peuvent vous apporter les bons protocoles sanitaires et les progrès de la génétique dont nous avons parlé plus haut. Le pâturage est la source d'aliments la moins coûteuse pour les bovins. Ce devrait être la principale source de fourrage pendant au moins 200 jours par an. Un système de pâturage bien géré fournissant un fourrage frais et nourrissant tous les jours favorise la production laitière des mères et permet le développement optimal des veaux.

• Pâturages tournants

Après avoir été broutées ou récoltées, les plantes fourragères doivent passer par une période de repos et de récupération. Divisez votre pâturage en enclos et placez les vaches et les veaux dans un nouvel enclos tous les un à trois jours. Permettez à la végétation de chaque enclos de passer par une période de repos et de nouvelle croissance de 30 à 45 jours ou plus, selon les conditions de croissance. Au moment du nouveau broutage, les légumineuses devraient commencer à fleurir de nouveau.

• Ajout de légumineuses

Inclure une importante proportion de légumineuses dans votre pâturage. Les trèfles, le lotier et la luzerne ont chacun leurs avantages. Les légumineuses fournissent de l'azote aux graminées et ajoutent des protéines dans le fourrage, dont elles améliorent la qualité. Les légumineuses ont généralement une meilleure croissance estivale que les graminées de saison fraîche. Un pâturage idéal devrait être constitué de légumineuses et de graminées à parts égales. Sur les pâturages qui contiennent peu de légumineuses, en mars prochain, effectuez des sursemis sur sol gelé de trèfle ou de lotier. Si possible, cet automne ou cet hiver, faites brouter ces pâturages pour qu'ils soient courts, ce qui réduira la compétition exercée par les graminées existantes contre les jeunes pousses de légumineuses qui auront été semées sur le sol gelé.

• Fertilisation du sol

Les pâturages peu fertiles ne produisent pas un bon fourrage. Prélevez des échantillons de sol si vous ne l'avez pas fait récemment. L'analyse vous indiquera s'il faut effectuer une fertilisation supplémentaire. Une analyse de 20 \$ vous permettra de prendre la bonne décision sur la quantité d'engrais à épandre et sa composition. Le phosphore et le potassium sont essentiels à la croissance et au développement des plantes. L'azote favorise la croissance des graminées, notamment dans les pâturages de graminées. Un système de pâturage tournant dans lequel les animaux changent d'enclos à intervalle de quelques jours assure une répartition égale du fumier et de l'urine sur l'ensemble du pâturage et une croissance encore plus égale.

Gardez le canola dans votre rotation pour 2015!

Brian Hall, spécialiste de la culture des haricots comestibles et du canola, MAAARO

En 2014, dans les régions où la saison de croissance est courte, de nombreux producteurs ont profité des contrats et des prix avantageux offerts pour les céréales de printemps et le canola. Ils ont ensemençé de plus grandes superficies de céréales aux dépens du canola. Ceux qui ont semé des céréales ou du canola ont bénéficié de rendements supérieurs à la moyenne. Cette année, grâce au temps frais de l'été et aux pluies plutôt abondantes, on a obtenu des peuplements denses et un excellent remplissage de grain.

La qualité était généralement bonne, mais le fusarium était présent dans certaines régions. Les rendements de canola supérieurs aux attentes ont apporté des bénéfices économiques satisfaisants, des chiffres de 1 à 1,75 tonne/acre ayant été fréquemment signalés. La plus grande déception est venue de l'étiement de la récolte de toutes les cultures, et cet automne, la superficie ensemencée en blé d'automne est beaucoup plus faible. En 2015, on s'attend à ce que la superficie de céréales de printemps augmente encore.

Dans la combinaison de cultures, où le canola se situe-t-il? Au cours des deux dernières saisons, les risques liés à la cécidomyie du chou-fleur et les mauvais résultats des mesures de lutte contre cet insecte ont entraîné une importante réduction de la superficie de canola. Ce phénomène était particulièrement notable dans le Nord de l'Ontario où les populations de cécidomyies étaient très nombreuses, et également dans une moindre mesure dans le Sud. Ne renoncez pas à la culture du canola. Déterminez quels sont les champs qui conviendraient le mieux à un ensemencement précoce de canola pour éviter d'importantes pertes dues à cet insecte.

Semez le canola tôt!

Le canola semé à une date précoce est peu exposé aux dommages causés par la cécidomyie du chou-fleur parce que c'est au stade végétatif (de rosette) qu'il est le plus vulnérable. Après leur hibernation, les

populations de cécidomyies n'émergent généralement pas avant le milieu ou la fin du mois de mai. Au pic de leur première émergence, le canola semé en avril se trouve alors à la fin du stade de rosette ou au stade de la montée à graines et n'est pas gravement attaqué. Le canola semé précocement subit régulièrement moins de dommages que celui qui est semé plus tard. Selon votre région, il peut être préférable de semer le canola en premier.

Emplacement du champ et rotation

La rotation est la stratégie de prévention de la cécidomyie la plus efficace. Cet insecte passe l'hiver dans les anciennes cultures de canola. Ne pas semer de canola près des champs où cette culture a été produite l'année précédente. La cécidomyie du chou-fleur vole mal, de sorte que les populations ne migrent que vers les champs voisins ou sont transportées par le vent. Quelle devrait être la distance entre les champs? Les données en provenance d'Europe suggèrent un minimum de 600 à 1000 pieds. En l'absence de culture hôte, la femelle adulte ne trouve pas d'endroit pour pondre. Les adultes ne vivent que un à cinq jours.

Dans le Nord, les populations de cécidomyies du chou-fleur étaient nombreuses dans la plupart des régions productrices de canola, de sorte que l'isolement sera difficile. En juillet dernier, à la Journée d'information au Centre de production de canola du nord, Rebecca Hallett, PhD, de l'Université de Guelph, a suggéré que la meilleure façon de réduire les populations de cécidomyies de façon significative dans une région donnée était de ne pas cultiver de canola dans cette région pendant les trois ou quatre prochaines saisons. La cécidomyie du chou-fleur peut survivre dans le sol au stade de pupe pendant au moins deux ans. Ainsi une rotation de trois ou quatre ans sans canola dans une région donnée aurait pour effet de réduire les populations de façon significative (sans toutefois les

éliminer) et permettrait de reprendre cette culture pendant au moins un ou deux ans sans risques importants. Dans le Nord, on cultive généralement du canola après des céréales de printemps, et du maïs. Selon les meilleures pratiques, il faudrait choisir des champs où on peut semer du canola à une date précoce, à l'écart des autres champs où on a produit du canola la saison précédente. Ce mode d'ensemencement peut poser des difficultés pour les exploitants qui produisent à la fois des céréales de printemps et du canola parce que l'ensemencement précoce de l'avoine et du blé de printemps apporte aussi un avantage significatif pour ce qui est des rendements.

Surveillance de la cécidomyie

Même là où on sème du canola à une date précoce, on doit assurer une surveillance des populations de cécidomyies et effectuer au besoin des traitements de protection à l'insecticide foliaire. D'autres informations sur les recommandations de gestion paraîtront cet hiver, lorsque les résultats des recherches et des essais au champ avec témoin auront été résumés.

Bien entendu, on ne peut obtenir de forts rendements de canola sans suivre les règles de base sur l'ensemencement et la fertilisation ainsi que la prévention des altises et de la pourriture sclérotique. La culture du canola contribue à « protéger » la rotation, elle permet de répartir la charge de travail, elle apporte une entrée d'argent en été, elle met à profit les éléments nutritifs du fumier et constitue une forme de lutte contre les mauvaises herbes qui, autrement, subsisteraient. Et la culture de canola permet l'ensemencement PRÉCOCE de blé d'automne (la plupart des années) tout en rapportant de l'argent.

Centre d'information agricole :

1 877 424-1300

Courriel : ag.info.omafra@ontario.ca

©Queen's Printer for Ontario, 2013

©Imprimeur de la Reine pour l'Ontario, 2013



Identification des moisissures de l'épi

Albert Tenuta, phytopathologue, grandes cultures, MAAARO

Fusariose de l'épi

C'est la forme de moisissure de l'épi la plus fréquente et la plus importante en Ontario. L'infection commence souvent à l'extrémité de l'épi et progresse vers la base de celui-ci. Dans les cas graves, l'enveloppe et l'épi lui-même fusionnent, ce qui leur donne un aspect momifié. La fusariose de l'épi (*Gibberella*) produit une moisissure caractéristique rose ou rouge foncé, bien qu'elle puisse également former une moisissure blanche qui la rend difficile à distinguer de la fusariose de l'épi et du grain (*Fusarium*). *Gibberella* produit plusieurs toxines dont le désoxynivalénol (vomitoxine ou DON), la zéralénone (ZEN) et la toxine T-2. Si le grain doit servir à nourrir les animaux, il est recommandé de faire faire un test de détection des mycotoxines (Figures 1 et 2).



Figure 1—Fusariose de l'épi (*Gibberella*)

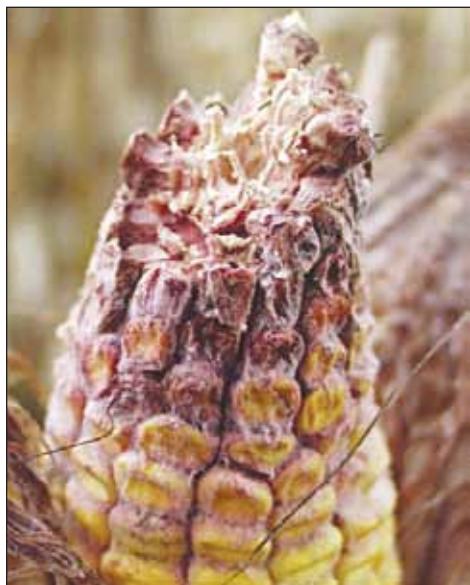


Figure 2—Fusariose de l'épi (*Gibberella*)

Fusariose de l'épi et du grain

Contrairement à *Gibberella*, *Fusarium* infecte souvent des grains qui sont dispersés sur l'épi ou que des insectes ou des

oiseaux, par exemple, ont endommagés en s'alimentant. L'infection par *Fusarium* produit une moisissure blanche ou rose ou saumon. Dans la plupart des cas, elle ne provoque pas de fusion de l'enveloppe et de l'épi. On observe des stries blanches ou un rayonnement à la surface de l'épi infecté. De nombreuses espèces de *Fusarium* peuvent produire ces symptômes, mais la principale espèce qui se trouve en Ontario est *Fusarium verticillioides* qui produit la fumonisine, une toxine cancérogène pour les humains (Figure 3).



Figure 3 – Fusariose de l'épi et du grain (*Fusarium*)

Pourriture sèche de la tige

Le symptôme caractéristique de l'infection par *Stenocarpella maydis* est une moisissure blanche qui commence à la base de l'épi et qui peut finir par le couvrir en entier. Sur les spathes, il peut également apparaître de la moisissure dans laquelle sont noyées de petites protubérances noires (des pycnides). Les pycnides sont les organes reproducteurs du champignon, qui produisent de nouvelles spores. Contrairement à *Gibberella* et à *Fusarium*, *Diplodia* ne produit pas de toxines importantes (Figure 4).



Figure 4 – Pourriture sèche de la tige (*Diplodia*)

Pourriture de l'épi produite par *Penicillium*

Cette infection produit une moisissure poudreuse verte bleutée claire qui se développe souvent sur la surface des grains ou entre eux. Cependant elle peut produire une décoloration interne de l'embryon (moisissure *Penicillium*). Les grains infectés peuvent apparaître blanchis ou striés. Ce problème peut être grave si le maïs est entreposé dans un lieu avec un fort taux d'humidité (plus de 18 %). De nombreuses espèces de *Penicillium* produisent des ochratoxines (Figure 5).



Figure 5 – Pourriture produite par *Penicillium*

Alternaria et *Cladosporium*

Ils produisent une moisissure noire sur l'épi et à la surface des grains. Ils posent des difficultés lorsque la récolte est retardée, en présence de lésions infligées par des insectes ou des oiseaux ou lorsque la gelée a causé la mort prématurée de la récolte. *Cladosporium* et *Alternaria* ne produisent aucune toxine connue. La croissance de la moisissure s'arrête immédiatement en anaérobiose (absence d'oxygène), si la récolte est entreposée ou ensilée dans de bonnes conditions.

Des quantités de moisissures faibles à presque indétectables au champ peuvent causer d'importants problèmes si elles ne sont pas détectées et si elles se développent dans le produit entreposé. Une bonne identification des diverses formes de moisissure de l'épi est essentielle. En plus de nuire aux rendements, ces champignons produisent des mycotoxines qui se répercutent sur la valeur alimentaire de la récolte, sa qualité marchande et la santé du bétail!

Devez-vous utiliser des semences de maïs et de soya traitées avec des insecticides?

Tracey Baute, entomologie, charge de programme—grandes cultures, MAAARO

Plusieurs champs de l'Ontario n'ont pas besoin de semences traitées avec des néonicotinoïdes.

Évaluez les risques de dommages posés par les insectes de début de saison

- Remplir la liste de contrôle pour l'évaluation des ravageurs du maïs ou du soya pour votre ferme.
- Utiliser la liste de contrôle pour cibler l'emploi de semences de maïs ou de soya traitées avec des insecticides dans les champs qui sont considérés à risque.
- Consulter le Guide des ravageurs de début de saison des grandes cultures pour de plus amples renseignements sur l'identification des ravageurs, les techniques de dépistage et les stratégies de lutte antiparasitaire intégrée. (www.gfo.ca/pestguide en anglais seulement)).
- Consulter le lien internet suivant Ontario.ca/bx19 pour savoir quels hybrides de maïs sont offerts avec seulement un traitement fongicide en vue de la saison culturelle 2015 en Ontario.

Consultez le lien internet suivant Ontario.ca/bx19 pour savoir si l'emploi de semences non traitées avec des néonicotinoïdes constitue une option pour vous.



Evaluating the 2014 Harvest

Continued from page 1

depending on harvest date. Oats were of good quality early on, but with the frequency of lodging issues, plus time left in the field, oats became unsuitable for the Quaker market and eventually deteriorated to feed grade. It was noted that some of the lodged fields had low bushel weight, which also took the crop out of premium markets.

Soybean harvest has been a challenge, with a very small window with decent conditions for harvest. Yields are low, (25-30 bushels/acre) and quality varies, depending on the bean's development stage at frost. Most were Grade 3 to Sample. Markets for soy are getting concerned on the level of oil quality, and they are tightening initial parameters

for receiving the crop (Grade 3 & 4 only). Moisture levels were also very high, so this made for a slow and expensive drying period.

In regards to corn, a FEW fields of early planted corn under plastic, put in place by the SAMCO planters, were harvested at a "Decent" quality. However, most of the regional corn crop, regardless of planter, was tough, with most everything past Silage being written off as not worth harvesting, or unmarketable.

All in all, 2014 was not a positive year for grain and oilseed production in Temiskaming.



The Earlton Farm Show will be held April 10th & 11th, 2015. It will be the 4th year held at the Earlton Arena but the 49th year of the show

Young FORESTRY SERVICES

We provide Farm Land Clearing to assist in revitalization of old crop lands. We have an extensive array of machinery designed to clear land of any trees and brush. Our qualified and experienced cutters and machine operators will remove any trees, brush or debris you request as well as any roughage to ensure your land is ready for crops.

www.youngforestryservices.com
Phone: 705.472.7400

BAYER CropScience

Marieke Patton
Territory Sales Manager

Mobile: 519-766-5205
Email: marieke.patton@bayer.com

Breaking Ground (in Northeastern Ontario)

NORTHERN ONTARIO AGRICULTURAL ROUND TABLE

The Northern Ontario Farm Innovation Alliance hosted the Northern Ontario Ag Round Table in Sudbury on October 28 & 29, 2014. Over 75 attendees from government & funding agencies, educational institutions, and producers from various commodity groups and regions participated in a series of workshops focused on:

- Agriculture Sector Analysis & Research Priorities
- Research Outreach and Extension
- Research Collaboration across Northern Ontario.

A speaker session was also held with participation from the Natural Sciences and Engineering Council, FedNor, Northern Ontario Heritage Fund Corporation and the Northern Producer Animal Health Network.

The findings from the Round Table have been summarized in a working report found at www.nofia-agri.com. This information will be expanded upon in further publications and partnerships are currently being sought to address various research needs.



NOFIA would like to thank the attendees for their enthusiastic and engaged participation! NOFIA would also like to thank OMAFRA, David Trivers and Brian Bell for helping plan and facilitate the workshops.

*Please contact NOFIA if a hard copy is preferred.

Please comment on the findings & specific agricultural attributes in your region.



Northern Ontario Farm Innovation Alliance
PO Box 2976, New Liskeard, ON. P0J 1P0
705-647-4783 nofia.on@gmail.com

NOFIA would like to thank its partners in delivering the Northern Ontario Agricultural Round Table:




ONTARIO SOIL AND CROP IMPROVEMENT ASSOCIATION
1 Stone Road West, Guelph, ON N1G 4Y2
Parry Sound, Muskoka
Algoma, Cochrane, Manitoulin
Temiskaming, Sudbury, Nipissing
Rainy River, Thunder Bay, Kenora

Claude Peloquin
Regional Program Lead
Cell: 705 491 5094
Claude.peloquin@ontariosoilcrop.org www.ontariosoilcrop.org

Mary Scott and Michel Champagne
Workshop Leaders

"Try to learn something about everything and everything about something."
– Thomas Henry Huxley


Rooted In Our Community
PROUDLY SUPPORTING YOU WITH FRIENDLY FACES AND EXPERT SERVICE.



JOHN DEERE
Bracebridge 905.826.2811
Orillia 905.823.8124
Halton 905.878.5181
Kingston 613.541.3812
Brockville 905.885.2981
Uxbridge 705.856.2442
West Parry 905.885.8712
www.greentractors.ca

"Many people look forward to the New Year for a new start of old habits."
– Unknown

AGRICULTURAL • INDUSTRIAL
Serving Northern Ontario & Abitibi Temiscamingue For Over 40 Years


BROWNLEE EQUIPMENT
HWY 11 N., EARLTON ON
(705) 563-2212 www.bequip.ca



SALES • SERVICE • RENTALS • PARTS

"Really great people make you feel that you, too, can become great."
– Mark Twain

CO-OP FS
CO-OPÉRATIVE RÉGIONALE DE NIPISSING-SUDBURY LIMITED
ALGOA
Algoma AG Center
Tel: 705-248-2201 Fax: 705-248-1109
Toll Free: 1-800-361-9255

THORNLOE
Tem AG Center
Tel: 705-647-6639 Fax: 705-647-9699
Toll Free: 1-800-861-7217

VERNER
Verner AG Center
Tel: 705-594-1268 Fax: 705-594-2229
Toll Free: 1-800-361-9255

"It's kind of fun to do the impossible."
– Walt Disney

Serving the Agricultural Community with Quality Lime and Limestone Products



Miller Minerals

A Division of Miller Paving Limited
P.O. Box 248
New Liskeard, Ontario P0J 1P0
Tel: (705) 672-2282
Fax: (705) 672-2746

"Dream as if you'll live forever,
live as if you'll die today."
– James Dean


West Nipissing Soil & Crop Improvement Association

"Life is what happens to you when you're busy making other plans."
– John Lennon

SGS AGRIFOOD LABORATORIES


Analytical services for when you need to be sure!
1-503 Imperial Rd N Guelph, ON N1H 6T9
(519) 837-1600 (800) 265-7175
www.agtest.com www.sgs.ca
ca.agri.guelph.lab@sgs.com


in partnership with:
Temiskaming Crops Coalition (TCC)
Temiskaming Soil & Crop Improvement Association
N.E. Ontario Wheat Growers
Temiskaming Grain Growers


LEISURE FARMS CONSTRUCTION LTD.
Supplier and Erector of Building Systems
Steel
Conventional buildings
Fabric
Overhead doors
A full time crew does nothing but erect buildings year round.
744 Quesnel Road, Sturgeon Falls, Ontario, P2B 2W3
Tel.: 1-888-828-0364 • Fax: 1-705-753-1876



OSCIA NEWS

November 2014
Issue



MESSAGE FROM THE PRESIDENT

As this special anniversary year winds down, my year as President of OSCIA is also coming to an end. Now, one year goes by rather quickly and in the bigger picture, 75 years isn't a whole lot either. This is especially true if you think about our soil. We are, after all, an organization that has soil as part of its name. 2015 has been declared the International Year of Soils by the Food and Agriculture Organization of the UN. This provides a terrific opportunity for the OSCIA Executive and Directors to draw attention to the soil resource. Efforts have been underway by others to have a provincial soil designated for Ontario. OSCIA is exploring ways we can help the campaign. Even if the process continues through the next year and comes to a successful conclusion, we believe that having a provincial soil is worthwhile.

As this message was being written, the Northern Ontario Farm Innovation Alliance (NOFIA), was preparing to hold a round table meeting in Sudbury on October 28-29 to develop a collaborative framework for agricultural research in Northern Ontario. Farmers in our province's north are struggling to keep agriculture research alive in

their regions while dealing with challenges of a northern climate, diverse soil types and great distances between farming communities. Our Soil and Crop representatives will be there to join with existing research stations as well as the Ministry of Agriculture Food and Rural Affairs and the Ministry of Northern Development and Mines and other northern farm groups.

Writing this message as your president has been a great opportunity this past year, to convey agricultural thoughts and observations. Hopefully, it's been with a bit of a northern perspective since that's where I live and farm. The picture you might imagine could be that of a beaver pond that looks very peaceful on the surface. A lot of the work happens quietly underneath the water but much needs to be stored up for a long, cold season. So, like the slap of a tail on the water, we northerners have to make a little noise once in a while just so the rest of the province still knows we're here!

Hope you had a successful harvest and "see you" at our February annual meeting in London!

Allan Mol
President, OSCIA



CoCoRaHS: A NEW VOLUNTEER PRECIPITATION NETWORK IN ONTARIO

There is a NEW, exciting program just launched this spring in Ontario.

inside this issue:

- message from the president
- CoCoRaHS: a New Volunteer Precipitation Network in Ontario
- new grant structure for 2015
- SARFIP 2014
- 2014 Ontario Forage Master Winner
- Attention Seed Growers
- More Options to Renew Your Membership
- Do You Need to Use Treated Seed?
- 2014 OSCIA AGM
- Soil Champion Award

Karla Jackson is the Ontario Volunteer Coordinator for this new program, as well as the Chatham-Kent Soil and Crop Improvement Association's secretary/treasurer. Farm and Food Care Foundation launched the Community Collaborative Rain, Hail and Snow Network (**CoCoRaHS**) in Ontario, which is a non-profit, grass roots, volunteer network of weather observers of all ages and background measuring and mapping precipitation (rain and snow) in their communities across Canada and the U.S. Currently in Ontario we have 123 volunteer observers and we need more to fill in the gaps that cannot be filled by automated stations. As we all know that "rain does not fall the same on all!"

Anyone who is interested in or invested in weather is encouraged to join. We have had the biggest response from the Ontario Conservation Authorities and Flood Forecasting committees who are using the network to help monitor their flood zones. My local association is also looking at



replacing our previous volunteer network with CoCoRaHS where the data is actually being used, and working with the Lower Thames Valley Conservation Authority on bringing our associations closer together. Agriculture and Agri-Food Canada is utilizing CoCoRaHS to monitor drought impact and risks. As well as meteorologists are using it in the U.S to validate and improve forecasts. Agronomists and growers can use a gauge at their farm to see how much moisture has fallen during the season. This can help answer where yields are gained or lost. They can also use the program to monitor areas further away if they are custom applicators.

With support from Farm and Food Care Foundation, OMAFRA, MNR, MOE, Environment Canada, and Agriculture and Agri-Food Canada we are able to offer official CoCoRaHS kits for \$30 (one-time fee). This cost can be covered by your region or association or split with the volunteers. I would like to call on you to assist in spreading the word to your members, or even join as a group to monitor your region's precipitation events.

For more information and to sign up, anyone interested can go to www.cocorahs.org/canada. Or contact me for more info or questions (Ontario Volunteer Coordinator, ontario@cocorahs.org, 519-352-5334 ext 228).

*Karla Jackson
Ontario Volunteer Coordinator,
CoCoRaHS Canada*



NEW GRANT STRUCTURE FOR 2015

Members of the OSCIA Executive have been working on a new three-year grant structure with the Ontario Ministry of Agriculture, Food and Rural Affairs for 2015 - 2018.

It is a great opportunity to re-evaluate the existing grant structure to see where improvements can be made and how to support local and regional associations with their projects.

The new offerings have been divided into two tiers. Seed Fair Grants and Regional Communication Grants remain unchanged. All other previous grants will be moved off the table. Tier One grants are available to support: educational activities, field days, guest speakers, bus tours, in-field trials, or demonstrations of new equipment or management techniques. Grants for these activities will be available on a first-come, first-served basis and will require pre-approval. Up to \$1,500 is available per year for a county/district or region.

Tier Two grants are available to support large-scale multiple-year projects across four major focus areas: Soil Health, Nutrient Management, Plant Health, or other categories that respond to major current issues. These grants are to be used for research projects for up to three years involving multiple county/district or regions. Collaboration is required. OSCIA will set up an easy to use blog where communication can take place between associations to encourage collaboration on projects and partnerships. Tier Two grants will also be approved by a merit-based process. Up to \$30,000 is available for 3-year Tier Two projects.

It is important to note that this new tiered grant structure is flexible. If your local or regional association have utilized the Major Grant funding in the past, you can now partner up with another association to strengthen your project. Another option may be to pursue one-year Tier One funding for the project instead.

SARFIP
2014 Species at Risk Farm Incentive Program

Farmers manage their resources for generations to come: SARFIP helps ease these costs.

Funding for still available for:

- Remote Watering Systems
- Tree planting projects
- Improved stream crossings
- Fencing projects

(226) 979-2465
www.ontariosoilcrop.org

Province of Ontario
Up to \$20,000

Canada

Information will be posted on www.ontariosoilcrop.org/en/resources/grants.htm when it is available, and distributed widely to all local and regional associations.

*Cobi Sharpe
Administrative Assistant, OSCIA*



2014 ONTARIO FORAGE MASTERS - WINNER

OSCIA is proud to announce the 2014 Ontario Forage Master winner, Simon Signer from Wellington County!

The provincial competition was held at 1 Stone Road on November 11, 2014 with four finalists; Barry Ribey from Bruce County, Tim Armstrong from Peel County, Mark Gamble from Grey County, and winner Simon Signer. Each participant presented in front of a panel of four judges on 'The Value of Forages' as it related to their own operation.

The winner was announced at the Royal Agricultural Winter Fair (RAWF) on November 12th during the 4-H Tribute to Agriculture Excellence Luncheon.

As the winner, Signer has been invited to compete at the 2015 American Forage and Grassland Council Forage Spokesperson Competition in St. Louis, Missouri on January 11-14, 2015. We wish Simon Signer all the best in the next competition.



Left to right: wife, Kristina Signer; daughter, Felicity Signer; winner Simon Signer; and OSCIA President, Allan Mol.

The deadline to enter the 2015 Ontario Forage Masters competition is April 17, 2015.

Contact your local SCIA or visit our website for an entry package, competition eligibility, and guidelines.

You could win great prizes from our sponsors; and as a finalist, tickets to the Horse Show at the RAWF, along with one night's accommodation as part of the competition.

credit card at annual meetings, other events or via phone by contacting your local association secretary or treasurer. All credit card information and payments are secured and encrypted, and all payments go to the local associations.

These convenient options will save time for both members and local associations. With an online database of members, accessing membership status for renewals and for discounts and benefits at events will be quick and easy. As a member, you can access and update your own profile via computer, tablet or smart phone at www.oscia.wildapricot.org (we do need your email address in the system for this).

For more information or assistance, please contact Cathy Dibble cdibble@ontariosoilcrop.org 519-463-9737; or Cobi Sharpe, csharpe@ontariosoilcrop.org 519-826-3152

*Cathy Dibble
Lead Regional Communications Coordinator*

Attention Seed Growers! OSGA's 2014 Annual Meeting



When? December 2, 2014
Where? Four Points Sheraton, London, ON

RSVP by November 26 by calling 519-826-3152, email cobi.sharpe@ontariosoilcrop.org, or visit www.oscia.wildapricot.org

MORE OPTIONS TO RENEW YOUR MEMBERSHIP!

OSCIA is pleased to offer our members more ways to manage your membership and Soil and Crop-related notifications.

Our secure, online membership system offers members the opportunity to subscribe to electronic newsletters and other OSCIA news, renew your membership, register for certain events and pay online with your credit card if you wish. We can even send out reminder emails letting you know when it's time to renew.

We can now also accept your membership renewal payment by

Do You Need to Use Insecticide-Treated Corn and Soybean Seed?

Many Ontario Fields Don't Need Neonicotinoid Treated Seeds

Resources available to help make a decision

- Guide to Early Season Field Crop Pests
- Pest Evaluation Checklist for Corn or Soybean for Targeted Use of Treated Seed
- Field Crop Scouting Infosheet and video
- How to Assess Fields For Early Season Insect Risk Factors

ontario.ca/bx1n



Ontario Soil and Crop Improvement Association

1 Stone Road West, Guelph, ON N1G 4Y2

P: 519-826-4214 F: 519-826-4224

E: oscia@ontariosoilcrop.org W: www.ontariosoilcrop.org



2015 OSCIA Annual Meeting

February 3 - 4, 2015
Lamplighter Inn & Conference
Centre, London



Featuring:

Ontario Forage Master Winner, Simon Signer from Wellington County

Keynote Speakers:

Dr. D. Montgomery, '*A Case for Global Soil Restoration*';

Dr. Richard Cruse '*Is Soil and Water Degradation Inevitable?*';

Blake Vince '*Soil Health*';

Peter Marshall '*Labrador Passage*' canoeing adventure...

...and more to be confirmed.

Updates will be posted on our website.



Grassroots Innovation Since 1939

Ontario Soil and Crop Improvement Association
1 Stone Road West, Guelph, ON N1G 4Y2
P: 519-826-4214 F: 519-826-4224
E: oscia@ontariosoilcrop.org W: www.ontariosoilcrop.org

SOIL CHAMPION AWARD

Brought to you by the
Ontario Soil and Crop Improvement
Association



Grassroots Innovation
Since 1939

Nominate a deserving champion!

To be eligible for the annual Soil Champion Award, an individual must be a resident of Ontario *or* have contributed to soil management in a way that directly influences improved soil health and crop productivity sustainability in Ontario.

Sustainable soil management practices may be defined as those that:

- Make the most efficient use of nutrients;
- Support systems with no net loss of organic matter and soil aggregate stability;
- Builds the population and diversity of soil organisms;
- Effectively manages surface water to support reduced tillage systems.

How to make a nomination

The nomination form may be downloaded from www.ontariosoilcrop.org/en/resources/sca.htm. Completed forms and supporting material can be sent to csharpere@ontariosoilcrop.org.

Deadline for all nominations and supporting documents is **December 15, 2014**.





Growing Forward 2

A federal-provincial-territorial initiative

Growing Your Farm Profits

Planning for Business Success

Start the business planning process by attending this FREE two-day interactive workshop. You will:

- Assess business management practices
 - Determine priorities and key goals
 - Develop realistic action plans
- Learn about cost-share funding opportunities

Canada-Ontario Environmental Farm Plan (EFP)

Producers are invited to attend FREE EFP (Fourth Edition) Workshops to:

- Learn about best management practices
- Develop an action plan for their farm

Learn about cost-share funding opportunities

Biosecurity Workshop

At this one-day workshop, an experienced veterinarian will show you the benefits of having an on-farm biosecurity program, and identify key practices which will enhance biosecurity measures on your farm.

Maximizing Your Traceability Investment Workshop

This in-class workshop will focus on how you can gain a competitive advantage and improve your bottom line with your traceability system. Real life examples and business profiles focused on traceability best practices will be examined throughout the workshop.

Food Safety Webinars

Looking to keep up to date on the latest food safety practices and help strengthen your Growing Forward 2 application? Join us for any or all of the food safety workshops, covering a variety of important food safety topics. All workshops are online as webinars, taken from the comfort of your home or business.

Workshops and Webinars in your area

Growing Your Farm Profits

Location	Day 1	Day 2
Earlton	January 5	January 12
Matheson	January 6	January 13
Kapuskasing	January 7	January 14
Powassan	January 10	January 17
Verner	January 24	January 31
Massey	February 17	February 24
Bruce Mines	February 27	March 6
Mindemoya	March 24	March 31
En Français		
Earlton	13 mars	20 mars
Verner	14 mars	21 mar

Environmental Farm Plan - Northeast

Location	Day 1	Day 2
Massey	January 16	January 23
Bruce Mines	February 5	February 12
Powassan	February 7	February 14
Earlton	February 9	February 16
Matheson	February 10	February 17
Kapuskasing	February 11	February 18
Verner	February 21	February 28
Mindemoya	March 2	March 9
En Français		
Earlton	27 mars	3 avril
Verner	28 mars	4 avril

Register Online at www.ontariosoilcrop.org



Qualified Labour Needs?

Please take a few minutes to fill out this brief survey of Ontario Ag producers to determine:

- Shortages of qualified labour
- Education, training & skills development needs of producers, families, workers
- Distance/proximity limitations to obtaining required training

Please go to: <https://www.surveymonkey.com/s/SoilCrop>

AGM of SUDBURY SCIA

By Mack Emiry, Treasurer, SSCIA

On Dec. 16/14, 16 members and guests met in Val Caron to plan for the upcoming year. The Provincial Director's report highlighted the changes to the OSCIA grant structure, which will be effective April 01, 2015. Tier One grants will support County/District activities for educational events (speakers, field days, bus tours, etc.) as well as ONE year field crop trials or other demonstrations. The maximum available per association will be \$1500.00, at 100% cost share. Tier Two grants will replace previous Major grants, Partner grants, and Paired Partner grants. All Tier Two grants will now require the support of 2 or more Counties/Districts. It will provide up to \$30,000 for a maximum 3 year period in support of projects for Soil Health, Seed Health, and Nutrient Management. Selection of the projects will be based on the merit of the proposal. The Director also noted that the Soil Champion Award, introduced in 2014, is open for nominations until Dec.15, 2014.

In support of the new grant system, Dan Poulin spoke in support of developing a project on GPS mapping of soil sampling and automatic application of the appropriate analysis and amount of nutrient. This project will be developed further at the Feb.18 Directors project meeting. Janet Parsons spoke to the meeting to indicate that West Nipissing was developing another application to NOHFC for land clearing or tile drainage funding, and will be accepting any indications of interest from farmers. Mary Scott spoke on the funding opportunities presented by the GF2, EFP, and OSCIA programs. Stephanie Vanthof from NOFIA gave an update on the organizations objectives, and the current status of activities to that end. They plan to soon employ a person who will be tasked with developing a Northern Ontario Information Hub. It will catalogue information on existing organizations in the north.

Jim Found was acclaimed as President, as was Steve Mailloux as Vice. Mack Emiry continues as Treasurer. Neil Tarlton was nominated to represent the group at the OSCIA AGM, and Jim Found will be the delegate to the NEOSCIA AGM in Earlton.



FERTILIZE / FERTILISEZ

SOW / SEMEZ

PROTECT / PROTEGER

DIFFERENTLY
DIFFÉREMENT

3 AND 5 STAR
PROGRAMS

PROGRAMMES
DE FERTILISATION
3 ET 5 ÉTOILES

112 Ontario Street
Notre-Dame-du-Nord

SYNAGRI.CA

"The biggest mistake people make in life is not trying to make a living or doing what they most enjoy."
– Malcolm Forbes

Committed to Sustainable Agriculture



www.temiskamingshores.ca
1-705-672-3363

"Doubt can only be removed by action."
– Johann Wolfgang Von Goethe

Flexible Financing

We can't predict the weather, but we can help you plan for your future needs.

That's why we've developed a program to finance your business called Scotia Flex® for Agriculture.

For More Information please contact one of our Agriculture Banking Advisors at your local Scotiabank Branch.

Agricultural Banking



* Registered trademarks of The Bank of Nova Scotia.



John Vanthof MPP/député
Timiskaming-Cochrane

New Liskeard Office/Bureau
247 Whitewood Ave., Box 398
Pinewoods Ctr., Unit 5
New Liskeard, ON P0J 1P0
Toll Free: 1-888-701-1105
Fax: (705) 647-1976
Email: jvanthof-co@ndp.on.ca



Working for you in
Timiskaming-Cochrane

Travailler pour vous dans
Timiskaming-Cochrane

www.johnvanthof.com

"You can delegate authority,
but not responsibility."
– Stephen W. Comiskey

**CAISSE POPULAIRE
DE VERNER LIMITÉE**

1, rue Principale Est,
Verner (ON) P0H 2M0
www.caissealliance.com

Stéphane Méthot, M.Sc.

Directeur général / General Manager
stephane.p.methot@acpol.com

- Téléphone : 705.594.2389 poste 202
- Télécopieur : 705.594.9423

"We Do More Than Just Agricultural Loans!"

• VOTRE PARTENAIRE FINANCIER •

"To play it safe is not to play."

– Robert Altman



KOCH GRAIN ELEVATOR (EARLTON) INC.

Licensed Grain Buyers
affiliated with
Parrish & Heimbecker Ltd.

Buyers and Sellers of all
Grains and Commodities

Box 387 Earlton, Ontario Canada P0J 1E0
Tel (705) 563-8125 Fax (705) 563-2943
E-mail: normerkoch@telusmail.com

"The greatest barrier to success
is the fear of failure."
– Sven Goran Eriksson

We bring you the latest
technology in
Northern Ontario.

Put your confidence in the
DEKALB® BRAND



ALL SEASON STRONG

www.dekalb.ca

DEKALB® and DEKALB and Design® are registered trademarks of Monsanto Technology LLC, Monsanto Canada, Inc. licensee. ©2010 Monsanto Canada Inc.



FarmCredit | Financement
Canada | agricole Canada

1-800-387-3232

Sustainable New Agri-Food Products (SNAP) Program Helps Northern Businesses Create Value-Added Products



In the spring, RAIN and its partners announced a new funding initiative for local food and agricultural producers in northern Ontario. Launched in March, the Sustainable New Agri-Food Products (SNAP) Program provided farmers or agri-food businesses up to \$5,000 toward the purchase of equipment to create new agriculture or food products. The program is closed and in the final stage of review, with successful applicants being notified in early December.

Algoma Highlands Wild Blueberry Farm in Wawa, Ontario was one of the businesses awarding funding under the SNAP program. The wild blueberry farm was successful in receiving funding for commercial kettles and food processors to create value-added blueberry products including jams, BBQ sauce and syrup at an on-farm commercial kitchen processing facility. Other projects from across the north have been awarded since June, with some businesses already marketing their new agriculture and food products.

The \$290,000 in funding for the SNAP Program, provided by the Northern Ontario Development Program through FedNor and Industry Canada, is administered by a group of organizations from across the north. The Rural Agri-Innovation Network in Sault Ste. Marie, Eat Local Sudbury Cooperative in Sudbury, Northeast Community Network (NeCN) in Kapuskasing, and Clover Valley Farmers'

Market in Fort Frances regionally delivered the program. The SNAP Program was a pilot, and is in the evaluation stage to determine whether it will be reintroduced in coming years.

For further information about this program, please call 705-942-7927 Ext. 3024 or visit: www.rainalgonia.ca/SNAP



Foodies and Farmers Discuss Local Food Strategy for Sault Area

On November 21st and 22nd, 2014, the Sault & Area Food Summit took place in downtown Sault Ste. Marie. Organized by the RAIN, the two-day Food Summit kicked-off Friday evening with a Harvest Dinner Fundraiser which raised nearly \$5,000 for the Soup Kitchen's Good Food Box.

Saturday, the Food Summit continued with an interactive community discussion. Guest speakers from across the north shared their experiences, including Kendal Donahue of Eco Superior Environmental Programs in Thunder Bay. Kendal shared how Thunder Bay and Area have successfully implemented a Food Strategy, which is a community-led approach to identifying issues and solutions for the region's food system.

"The Food Strategy aims to lay out the principles of a healthy and sustainable food system—principles like access to healthy food for all, preserving and maintaining local waters and agricultural

lands, and encouraging regional and local food self-reliance," explained Kendal.

Many community groups and individuals in the Sault area are working on similar issues, and gathered Saturday to share experiences and form strategic partnerships. Farmers, foodies, and community organizations discussed how issues such as food skills, food security, and food access can be addressed in the Sault area, and established actions and goals for the upcoming year regarding issues and opportunities in the local food system.

To learn more about this event, or similar events in the future, please contact Katie Filion, RAIN Market Development Specialist, at kfilion@ssmic.com.

RAIN Regional Infrastructure Program

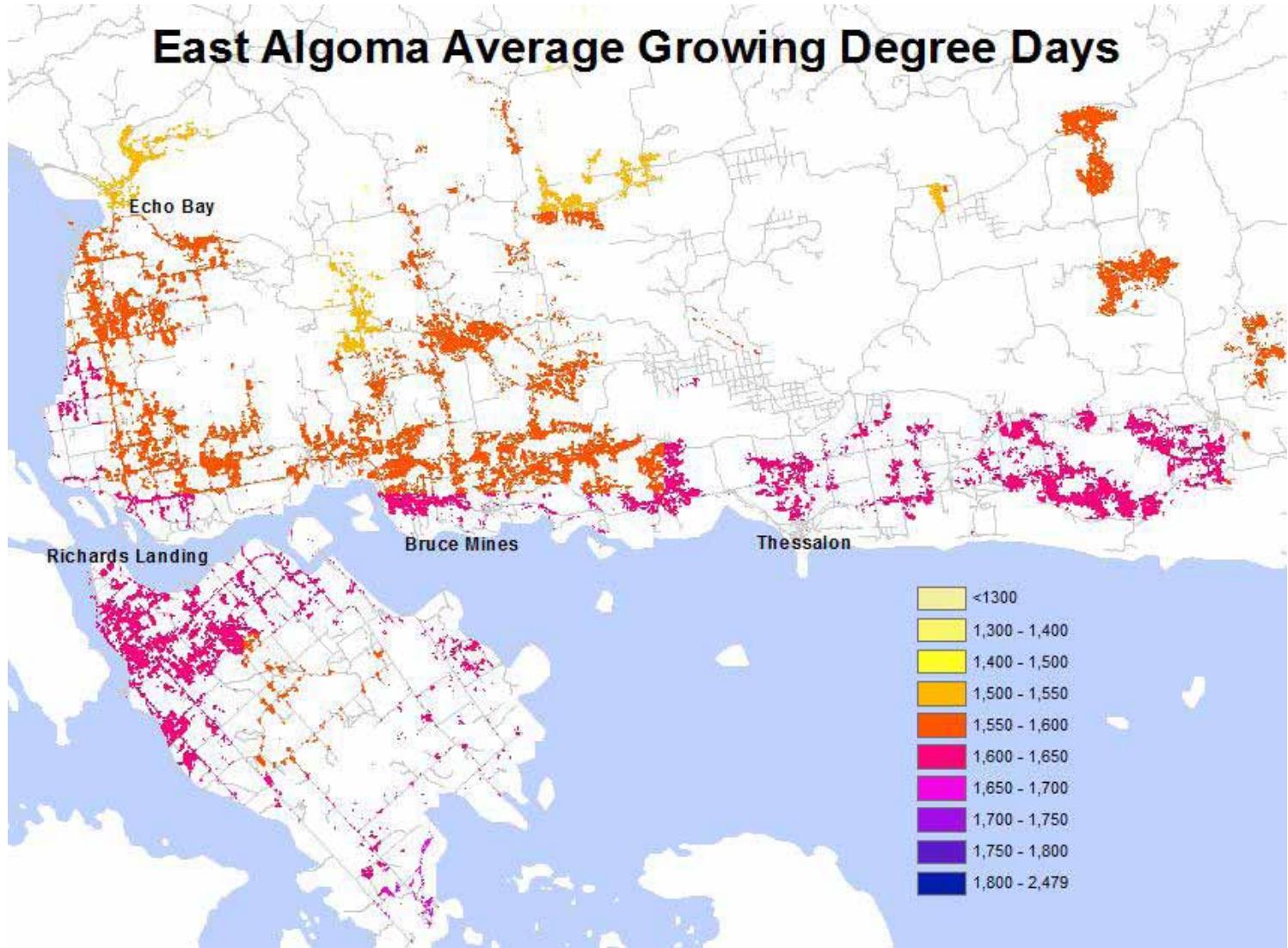


In 2014, The Rural Agri-Innovation Network in partnership with the Sault Ste. Marie Innovation Centre was approved for \$989,000 from the Northern Ontario Heritage Fund Corporation and the province of Ontario to administer a Regional Tile Drainage Program for Algoma. Through this project, RAIN expects to Tile Drain approximately 1,700 acres on 33 fields throughout the region by the summer of 2015. The program has stimulated the agricultural sector in Algoma by preparing more acres for high value crops with the services of Acton Contracting and Tulloch Engineering.

To address the growing need for sub-surface drainage systems and land expansion, RAIN is undergoing another consortia application to NOHFC which would provide a 50% grant subsidy up to \$500 per acre to eligible participants in the Algoma and Sudbury Regions for 2015-2016. Upon approval, we anticipate that over \$3,000,000 in Agricultural Infrastructure

Breaking Ground (in Northeastern Ontario)

Sustainable New Agri-Food Products (SNAP) Program



Development projects in the Algoma, Manitoulin and Sudbury regions would be projected over the next 3 years.

For more information on how to apply for the 2015-2016 Regional Infrastructure Development Project, please contact Janette Wallace, Program Coordinator at 705-942-7927 x3135 or email jwallace@ssmic.com.

Data Unleashed Using Geographical Information Systems (GIS)

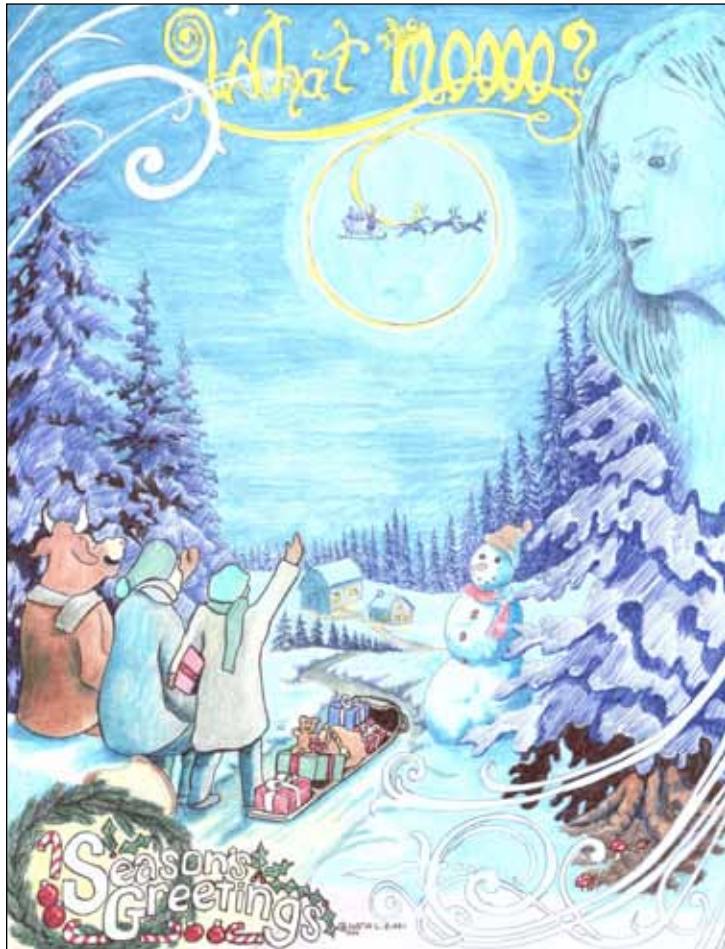
Researchers at RAIN recently unleashed the power of GIS and have been assembling key agricultural data for northern Ontario agriculture clusters. This data includes information on land use, soils, average climatic conditions, flow accumulation and infrastructure (gas lines, grain elevators, tile drainage installations). This detailed information can be used to develop strategic opportunities for local farmers such as identifying suitable agricultural lands for specific crop needs or identify the most economic locations for new abattoirs.



The Algoma Rural Agri-Innovation Network (RAIN) is a project of the Sault Ste. Marie Innovation Centre (SSMIC) and NORDIK Institute, with collaboration and support from local agriculture associations, producers, businesses, municipalities, and funding organizations. For more information on RAIN projects, please contact: info@rainalgoma.ca or visit www.rainalgoma.ca

N.E.O.S.C.I.A.

North Eastern Ontario Soil and Crop Improvement Association
Serving the Northern Agricultural Community since 1966



This month's artwork comes from Justin Burry of Englehart.

View more of his work at <http://justin-burry.tripod.com>

Credit Card: Please complete the following information and send to your district secretary/treasurer

Member Full Name: _____

Dollar Amount: _____

Credit Card Type: Visa Mastercard

Credit Card Number: _____

Expiry Date: MM/YY _____ / _____

Verification Number: (last 3 digits on back of card) _____

Street Number and Name: _____

Town/City: _____ Postal Code: _____

Email Address: _____

Email Receipt? Yes No

'Tis the Season to **RENEW** Your Soil and Crop Improvement Association Membership!!!



Grassroots Innovation
Since 1939

Involved in Agriculture?
Interested to hear about
leading-edge ag management
practices? We invite you
to renew your local Ontario
Soil and Crop Improvement
Association membership!

Benefits of OSCIA Membership
are Many and Include:

- Current Information on Crop Production and Soil Health
- Funding to Test and Share New Ideas to Increase Profitability
- Crop Tours Showing Practical Results of Research Trials
- Quarterly Newsletters on Timely Soil and Crop

Algoma

Murray Cochrane,
222 Ansonia Road,
Thessalon ON P0R 1L0
705-842-5622

Email: scatacres@live.ca

Cochrane

Cindy Squirrell, RR#3,
Cochrane ON P0L 1C0
705-272-6470
Email: cindysquirrel50@gmail.com

Manitoulin

Marca Williamson,
94 Watson's Bay Road,
Tehkummah ON P0P 2C0
705-859-2528

Email: wfarms@amtelecom.net

Muskoka

Katya Riley,
1375 Butter & Egg Road,
Bracebridge ON P1L 1X4
705-764-1695
Email: k.riley@sympatico.ca

Management Topics

- Eligibility to Participate in Ontario Forage Masters Competition
- Registration Discounts at Qualifying Conferences and Events
- Free Brunch at Canada's Outdoor Farm Show

NEOSCIA memberships are based on the calendar year and will be up for renewal shortly! Come out to your local association's annual meeting to renew in person OR renew online at www.oscia.wildapricot.org OR contact your local secretary:

Nipissing West/Sudbury East

Normand Delorme,
10946 Hwy. #17,
Verner ON P0H 2M0
705-594-2324
Email: normdiane@hotmail.com

Parry Sound/Nipissing East

John MacLaughlin,
Box 454,
Sundridge ON P0A 1Z0
705-384-7142
Email: pineglen20@gmail.com

Sudbury West

Mack Emiry,
106 Woolsey Road,
Massey ON P0P 1P0
705-865-2249
Email: macbeth@hotmail.ca

Temiskaming

Sheila Randell,
257218 Hillview Road,
New Liskeard ON P0J 1P0
705-647-7195
Email: tccorg@hotmail.ca