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# ST. CLAIR REGION SOIL & CROP NEWS



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## Southwestern Ontario

# September 2008

### Serving Kent, Essex and Lambton County Soil & Crop Members

### Message from the Provincial Director of St. Clair Soil & Crop

Well, summer has gone again and where I live, in good old Essex County, we have not seen an inch of rain in the last six weeks! The corn has all but given up and died, all burned up for the most part and the soybeans are turning fast. The grain seems to be present but not much corn is there, so I expect low test weights and a reduced yield. The soybeans vary from field to field but pod numbers seem lower and smaller. A complete turn-around from my last newsletter comments.



*Piglets on the loose in Ridgetown! C. Baresich*

I have been to several summer meetings over the past couple of months in our region and have seen some great ideas and speakers. Thinking out of the box is not a new concept by any means however, we as farmers need to start doing a better job of finding new solutions to problems. Finding new ways to manage our use of fertilizer including, finding alternate products or doing a better job of soil testing are some examples. Eric Lund from Kansas did some soil testing in Lambton County and offered different takes on pH (potential of hydrogen) and EC (electrical connectivity). This was an informative meeting, well worth attending. Good job to those in Lambton who organized this event!

Essex had their Saturday afternoon tour listening to Gabriel Ferguson and Adam Hayes speak on the fundamentals of soil structure, fertility and balancing our fertilizer programs. Case's new 300 series vertical tillage tool kept most of us interested in burning diesel and on the other end, a demo by Gary Seagrave with his oil seed press and biodiesel mixing equipment which was home-made from parts imported from China.

Don't give up the ship, let's keep on going!  
We all like what we are doing, but it sure would be better if it always paid.

*Henry Denotter, President, St. Clair Region  
and Provincial Director*

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### Thank-you to the following sponsors for this edition:

*Lambton College*                      *St. Clair Region Conservation Authority*

**Your contributions help to make this newsletter possible!**

## Nutrients in the Soil

By: Michael Dick, CCA-ON

Agricultural Technician, Essex Region Conservation Authority (ERCA)

**The Essex Soil and Crop Improvement Association** held their Annual Farm Twilight Tour this year at Malden Valley Farms, winner of the 2007 Conservation Farm Award. This year's event focused on nutrients in the soil.

**Malden Valley Farms**, established over 50 years ago, has incorporated many conservation minded farming practices over the years. These included no-till cropping, ditch bank protection by buffer strips, rock chutes and tile outlet protection. Other



**Malden Valley Farms**  
**2007 Conservation Farm Award**



**Soil Nutrient Profile Demonstrations**

features of the farm included windbreaks, a woodlot and a pond.

The Twilight Tour featured demonstrations on nutrient profile in the soil, and the effect of an alfalfa crop on soil structure, by Adam Hayes, Field Crops Manager, OMAFRA. Gabrielle Ferguson, Nutrient Management Specialist, OMAFRA, talked about fertilizer alternatives and strategies in the new economic climate.

Additional demonstrations include corn and soybean variety trials, new conservation tillage equipment, and a

shop built biodiesel generator.

The day ended with conversation and a barbeque. The event was sponsored by the Essex Soil & Crop Improvement Association, Essex Conservation Club and Essex Region Conservation Authority with help and support from various local agri-businesses.



**Home-Made Biodiesel Machine**

**Lambton Twilight Tour – Thursday, August 14, 2008 4:45 p.m.  
At the Farm of Tony and Jane Straatman, Petrolia, ON  
by K. Gladstone**

**Speakers/Sessions:**

1. Peter Johnson, Cereals Specialist – OMAFRA; Peter opened the floor to questions:

**Environmental Stable Nitrogen** – did not work this year; was a major project for LSCIA in various plots; worked in some, didn't work in other; weather conditions were a factor; ESN didn't dissolve (coated/slow release) in many plots.

**Crop Insurance and Hard Red Wheat** – based on Provincial Performance Trials (average yield index); soft red out does hard red by 10% in yields; these are the numbers that crop insurance uses.

**Folicur/Proline** – results to date are all over the map; need all results in and sorted before recommendations can be made; average yield bump appears to be 5.4 bushels/acre.

**Cold Temps/Herbicides** – discussion about visual burn in the fields; Peter stated that when all is said and done, there may be a 3-4 bushel offset at the very most; nothing serious to worry about.

**Brady Code, Syngenta Crop Protection.**

Brady held a **pest management discussion** with the group:

- basically discussed various insects and their threshold levels; don't spray until the threshold levels have been reached;
- strong proponent of scouting your fields (especially in July); and
- talked about bean leaf beetles, soybean aphids, stink bugs, army worms, spider mites, etc.

**Andrew Troyer, VP Energy Marketing and Operations.** Andrew talked about fuel quality and biodiesel:



**Canadian diesel fuel quality ranks among the lowest** in the industrialized world; storage tank contamination usually caused by condensation in storage tanks; diesel has 1 year maximum storage; gasoline has 30 days maximum storage; algae in fuels can be a problems as well; use BugEye! Remove and change fuel filter often.

**Biodiesel** – the most common crop is soybeans; new government regulations will keep this in production; biodiesel must meet ASTM specs. 5% can be blended in winter; 20% can be blended in summer.



**Lambton Twilight Tour Continued**  
**Eric Lund, Veris Technologies Inc., Salina, Kansas U.S.A.**

[lunde@veristech.com](mailto:lunde@veristech.com)

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<http://www.veristech.com>

Eric Lund co-founded Veris Technologies in 1996 in Salina KS. Veris designs, manufactures, and markets soil sensors and control systems for the precision ag market. Veris equipment is at work in at least 36 states and 20 foreign countries. In his spare time, Eric operates an 800-acre wheat, soybean, and grain sorghum farm in Saline County Kansas. Innovations include long-term no-till, advanced crop rotations, site-specific applications, and on-farm trials of inputs including tillage practices, lime, seed populations, and nitrogen.

Eric attended the LSCIA Twilight Tour Meeting to demonstrate the 'Veris, on-the-go Soil pH Manager.' Roger Buurma assisted with this demonstration.

- An electrical current is measured between a pair of disks at the front of unit;
- Mobile sensor unit with on-the-go pH tester;
- Purdue University design;
- Sampler shoe goes up and down in the soil and unit is pulled along;
- Soil gets pressed against ruggedized pH electrodes;
- Electrodes washed after each reading;
- New soil sample pushes old soil out of the way;
- 5 miles per hour can do a 60 foot swath;
- Approximately 15 samples per acre;
- Recommended calibration with laboratory results (relative numbers);
- Computer generated visual mapping – good visuals.

Why not use grid sampling? Nothing wrong with those however this is newer technology that is capable of sampling more of the field and displays more of the variability that is found in the field (more special coverage). This unit offers more repeatability with fewer errors.





# OSCIA News...

September 2008

A NEWSLETTER TO UPDATE OSCIA MEMBERS,  
PRESIDENTS, SECRETARIES, TREASURERS, DIRECTORS,  
AND OMAFRA AGRICULTURE DEVELOPMENT CONTACTS —

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## OSCIA 2009 ANNUAL MEETING

**Date:** February 3 & 4, 2009

**Place:** Sheraton Fallsview  
Niagara Falls

## Message from the President

As the end of the summer approaches, there are a number of interesting updates from OSCIA. The summer meeting and associated events were held recently in Sault Ste. Marie and Thessalon, hosted by 1<sup>st</sup> Vice President Murray Cochrane and his wife Norma. The tours were very enjoyable and the excellent weather was a welcome change.



*Pat Lee*

The spouses were informed about wind turbines and visited the Canadian Bushplane Museum while the Directors held their meeting. Tuesday saw all of us visiting a large maple syrup operation and the St. Mary's Paper Mill. It was a very well-organized event, and we commend our hosts on their fine efforts.

OSCIA experienced changes in its constitution at its 2008 Annual Meeting. Most regions and many counties have updated their constitutions to match the provincial constitution. Overall, there are now 11 regions in the province, and election of provincial directors takes place within those regions.

Over the summer, most areas in the province have seen more than adequate rainfall, and crop growth in general is excellent. Harvesting quality forage continues to be a challenge. Forage competitions have been very successful this year with participation from twenty-five local associations and 232 participants. We look forward to the final competition at the Royal Winter Fair in November, sponsored by Pickseed Canada, Agri-Food Laboratories, and the Royal Agricultural Winter Fair. This continues to be a very popular program with the members.

The interest in the Nutrient Management BMP Demonstration grants co-ordinated by OSCIA and funded by OMAFRA has been very strong. Five projects have been approved for full funding at \$20,000 each and we will be asking for proposals in October for another five projects.

In July the Executive and a few staff members met with the Regional Communication Coordinators (RCCs), regional reps, and OMAFRA reps from Eastern and North Eastern Ontario. This meeting was held in Kingston where we discussed the roles and responsibilities of the RCCs, OMAFRA and OSCIA and how they interrelate. Everyone went away with a sense of satisfaction in knowing that a good working relationship exists between those groups and the local Soil and Crop Improvement Associations. We hope to enhance this working relationship by having each region develop a Communication Plan Framework. A similar meeting has been organized for regions from the southern and northwest parts of the province. We will meet with them in September in Ingersoll.

An annual September event, Canada's Outdoor Farm Show, is quickly approaching. Once again OSCIA will be partnering with Canada's Outdoor Farm Show, OMAFRA, and Bayer CropScience to provide brunch and informative presentations on agricultural management practices and new crop protection technology. Topics will include information on innovative strategies, a NEW one-pass, broad-spectrum herbicide for corn, and more new products from our sponsor. While you are there, it will be a good opportunity to view the OSCIA/OMAFRA plots and displays.

We are looking forward to seeing YOU at the Show. ♦

### **OSCIA Summer Directors' Meeting**

The OSCIA Summer Directors' Meeting was hosted by 1<sup>st</sup> Vice President Murray Cochrane and his wife Norma on August 17-19. Murray and Norma organized three days' events for the OSCIA Directors and their families in Algoma Country.



The event began on Sunday with a social time and barbecued meal at "Scattered Acres", the Cochrane farm near Thessalon, pictured above.

Monday's main event was the meeting of the Board of Directors, where the Board attended to business of the Association and planned for the future.

Provincial Directors are closely involved with the changes within the regions resulting from the amended OSCIA Constitution. They will be providing full support and feedback to the membership through fall meetings and messages in the regional newsletters.

An important part of the meeting was the election held for the President-Elect for the provincial association for 2009. Murray Cochrane was acclaimed for the position.



A tour of the Algoma district was enjoyed by all Directors, Past Presidents and their families. One stop included a visit to the large dairy farm of Vic and Tammy Fremlin (pictured above).

Along with a tour of the buildings, a visit was made to a corn trial site. An overview of their business was provided, along with a few tips in raising the profile of a business.

Hosting the summer meeting is a huge undertaking, one that requires a lot of attention to detail. The Cochranes are to be congratulated for the excellent job they did in organizing the three-day event. Those not familiar with the northern parts of Ontario were treated to a taste of what this beautiful area has to offer. ♦

### **Ontario Red Clover Research**

The use of red clover as an under-seed in wheat has declined in recent years, even though numerous research studies have demonstrated significant Nitrogen availability and agronomic benefits to following crops in the rotation, and environmental and soil quality benefits.

The Agricultural Adaptation Council - Ontario Research Development Fund from OMAFRA is supporting OSCIA in funding red clover research. The research is focused on the benefits of growing red clover, the screening and development of new varieties, tillage practices, and the development of management options relating to red

clover establishment. The project will be conducted by Dr. Bill Deen, University of Guelph, and located at the Elora Research Farm. This information would be communicated to Ontario farmers to help them to increase the yield and value of their red clover crops.

Red clover stands appear to be sensitive to winter wheat nitrogen rates. Profit in winter wheat exhibits a plateau response from nitrogen. Estimates of winter wheat Most Economical Return for Nitrogen (MERN) values could be evaluated with consideration to red clover benefits in subsequent crops.

Management options for dealing with non-uniform stands of red clover will be explored, particularly given the potential environmental consequences associated with uniform nitrogen applications to non-uniform red clover stands. This project will also help provide Ontario farmers with new varieties of red clover that will survive frosts and drought periods.

It is becoming increasingly difficult for Ontario farmers to compete with the increasing cost of inputs, such as fertilizers and fuel, required to produce their crops. With increasing prices of fuel, many Ontario farmers are switching from conventional tillage to a form of no-till. This project will also help provide Ontario farmers with comparisons of different methods of tillage (conventional till, no-till, no-till with coulters and no-till residue removed) that will help determine the degree of tillage required to overcome no-till effects on red clover stands. ♦

### 2008 Ontario Forage Masters Program

232 OSCIA members entered the 2008 Ontario Forage Masters Program, representing 25 local S&C Improvement Associations.



A number of 4-H members (28) are included in the participant numbers.

The entrants in each county are vying for valuable prizes provided by Pickseed Canada and Agri-Food Laboratories.

Recently, OSCIA announced that the Royal Agricultural Winter Fair has joined the program by sponsoring a final competition to select the **2008 Ontario Forage Master**.

The first-place winners in each county are eligible to submit an entry to the provincial office by October 1<sup>st</sup> to be reviewed by a judging panel. Up to six will be selected to participate in the final competition at the Royal on November 12.

The person selected as the **2008 Ontario Forage Master** will represent Ontario at the Forage Spokesperson Competition held as part of the American

Forage and Grasslands Council conference in June 2009 in Grand Rapids, Michigan.

Full details of the competition have been mailed to each local association, and can be found on the OSCIA website. ♦

### 2009 OSCIA Memberships

A notice will soon be sent to all local Soil and Crop Improvement Association secretaries regarding memberships for 2009.

Membership in your local association includes many benefits, including reduced admission to many agricultural events, bus tours, field trials, and being included on the mailing list for newsletters.

Your membership renewal for the coming year may be due anytime during the fall months, and your local association has a method in which to collect your fees.

Per the OSCIA Constitution, membership fees from the local associations is due into the provincial office no later than February 15, and many of them depend on timely payment from their membership in order to meet this deadline.

In order to keep your membership current, please ensure that you have provided your fee to the local association secretary. ♦

### Nutrient Management Grants

Two new grants were featured in the June issue of OSCIA News.

#### OSCIA Regional Nutrient Management Outreach Grant

OMAFRA has allocated funding to support new communication activities of regional Soil and Crop Improvement Associations that promote the adoption of Nutrient Management BMPs to the non – regulated (Nutrient Management Act) farm population.

- Up to \$4,000 per project is available on a first-come first-served basis to support regional activities directly related to increasing awareness and adoption of nutrient management regionally.

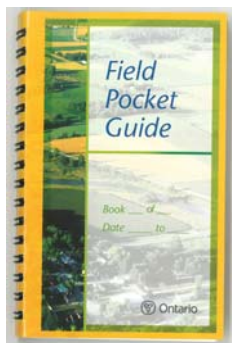
#### Nutrient Management BMP Demonstration Grant Letter of Intent Deadline – 4:30 pm October 13, 2008

OMAFRA has allocated funding to organizations supporting demonstration projects and new communication activities targeting any producers not regulated by the Nutrient Management Act. Up to \$20,000 of grant funds are available for innovative demonstration and validation field projects related directly to improving the management of nutrients on agriculture lands within Ontario.

- This grant is available to any agricultural organization, Conservation Authority, college or university.
- OSCIA has issued a Request for Proposal to solicit project proposals for funding consideration under the Nutrient Management BMP Demonstration Grant Program.
- The eligibility criteria and templates required for application are available at [www.ontariosoilcrop.org](http://www.ontariosoilcrop.org). ♦

## We Need Your Feedback

OMAFRA's *Field Pocket Guide* was introduced as a practical way to record crop production activities to assist farmers in achieving economically feasible and environmentally responsible management of soils, water, air, crops and livestock. It contains a variety of record keeping pages and some handy conversions and calculations.



The *Field Pocket Guide* is currently distributed, free of charge, to producers who visit OSCIA displays at regional agriculture conferences, as well as at EFP workshops across the province.

Since 2004, over 25,000 copies have been distributed, and we are out of stock! We need your comments to tell us what you like, dislike and would like to see improved in the book. Please go to our online survey <http://www.surveymonkey.com/fieldpocketguide> and tell us what you think. The survey is brief and will require only a few minutes to complete. If you provide your contact information, your name will be entered into a draw for a \$50 Canadian Tire gift card (draw to take place on October 15, 2008). Survey closes October 10, 2008.

Thank you for your time and for your feedback. ♦

## Reminder! Place Your Orders Early!

Promotional material is available on a cost-recovery basis from the provincial office.

Among other items, a supply of double-sided fleece vests with OSCIA logo embroidered, and embroidered OSCIA hats is available for local or regional associations to use at upcoming winter meetings as gifts for a special member or speaker, or as fundraising items at upcoming annual meetings.

Association secretaries may contact the provincial office for more information, or to place an order. ♦

## OSCIA Grant Deadlines

The deadline for local and regional associations to submit their claims for association grants is November 30, 2008.

Although the deadline is a few weeks away, local and regional associations are encouraged to submit applications (claims) for projects that are complete. ♦

## OSCIA Awards

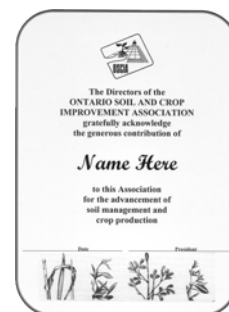
### Soil and Water Conservation Farm Award:

The purpose of this award is to recognize, reward, and acknowledge farmers who practice excellent soil and water management on their farms, as well as provide high profile to the basic principles of conservation. This is a resin all-weather sign measuring 16" x 19".



### Recognition Certificate:

This certificate is designed to recognize individuals in your community who have contributed to the organization. When requesting the certificate, please indicate the recipient's name and date of presentation. This is a paper certificate, suitable for framing, measuring 8½" x 11".



These awards are ideal for presentation at annual meetings. Both are available by calling Evelyn Howse at the provincial office (1-800-265-9751). Please allow 2 weeks for preparation and shipping time. ♦

## Climate Change Policy - E-Survey

Jeffrey Biggs, a doctoral candidate at the University of Toronto, is researching "How Canadian Climate Change Policy Affects Ontario Farmers". If you are interested in participating in an e-survey, contact Jeffrey directly at [Jeffrey.biggs@utoronto.ca](mailto:Jeffrey.biggs@utoronto.ca).

OSCIA is very interested in this topic. ♦

**Visit the OSCIA website**  
**[www.ontariosoilcrop.org](http://www.ontariosoilcrop.org)**



# CROP TALK

Volume 8, Issue 3

OMAFRA Field Crop Specialists – Your Crop Info Source

September, 2008

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### Brought to You by the Following OMAFRA Crop Specialists

Mike Cowbrough, Weed Management Program Lead  
 Hugh Martin, Organic Crop Production Program Lead  
 Horst Bohner, Soybean Specialist  
 Ian McDonald, Applied Research Co-ordinator  
 Albert Tenuta, Field Crop Pathologist  
 Keith Reid, Soil Fertility Specialist  
 Jack Kyle, Grazier Specialist  
 Brian Hall, Alternative Production Systems Specialist  
 Peter Johnson, Cereals Specialist  
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 Adam Hayes, Soil Management Specialist - Field Crops  
 Greg Stewart, Corn Industry Program Lead  
 Tracey Baute, Entomology, Field Crops Program Lead

**Editor:** Joel Bagg, Forage Specialist  
 Compiled by: Marian Desjardine, OMAFRA, London

## Are You Using OMAFRA's Field Pocket Guide?

If yes, we want to hear from you!

Since 2004, over 25,000 copies have been distributed, and we are out of stock! Help us determine how to move forward with this handy tool. Let us know what you like, dislike and would like to see improved in the book.

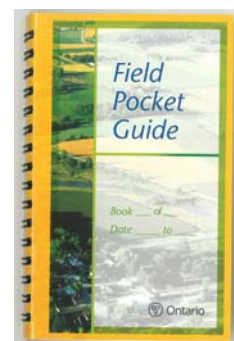
**Complete our online survey for a chance to win a \$50 Canadian Tire Gift Card!**

The online survey can be found at:  
<http://www.surveymonkey.com/fieldpocketguide>

The survey is brief and will require only a few minutes to complete.

If you provide your contact information, your name will be entered into a draw for a \$50 Canadian Tire Gift card (draw to take place on October 15, 2008). Survey closes October 10, 2008.

Thank you for your time and for your feedback!



## 2008 Ontario Winter Wheat Performance Trials Available on the OMAFRA website at:

<http://www.omafra.gov.on.ca/english/crops/facts/wwperf-08.htm>



## Targeting the Right Wheat Acres!

by Peter Johnson, Provincial Cereal Specialist,  
OMAFRA

The leap year rule prevails! High prices drove growers to look for every available acre to plant wheat on. Then, after an incredible start to the 2008 season, Mother Nature delivered her normal leap year package of the weird, wild and wonderful. Repeated frost in May, hail in June, and right about harvest, it started to rain every day. Add to this sprouts, mildew, fusarium, black point, and ergot. Leap years! Given all these frustrations, it's a wonder growers are even considering planting wheat this fall. But in the majority of cases, yields were good, the final quality better than expected, and we like to grow wheat! However, the lessons learned from 2008 should be heeded. Growers should refocus to plant the right acres, not just every acre.

### After Beans

Whether after edibles or soybeans, this is a no brainer. JUST DO IT! The downside this year will be late harvested beans resulting in late planted wheat. That means lower yield potential. Still, this rotation works!

### After Canola

You don't even need to ask. Planting can be early, the rotation is right, yield potential is awesome. Why wouldn't you?

### After Silage Corn

Ouch! This one was ugly this year, at least for many growers. While the bulk of the winter wheat crop made grade 3 or better, the fields that were "feed account fusarium" could often be traced back to this rotation. So there is a risk. The upside - fusarium is the only risk, and you can often plant early on silage ground. Two management "musts" in this scenario:

- use a variety that is MR for fusarium ([www.gocereals.ca](http://www.gocereals.ca)), and
- spray with a fusarium fungicide.

Most years, this will be enough to get you quality wheat, and high yields to boot.

### After Hay

Wheat after alfalfa works. But why you would waste the nitrogen credit for corn (100 lbs/ac) for the credit on wheat (50 lbs/ac)?

Wheat after grass hay is a big risk because of Take-all. A root disease that infects in the fall, Take-all can rob 50% of your yield or more. In 2008, there was definitely significant Take-all in these fields. Yield impact is an estimated 10 to 30% loss. Management options in this situation are limited. Try not to plant early because the Take-all has more opportunity to infect. Using potash as a seed placed fertilizer provides some Take-all suppression. But it is still a risk!

### After Oats

Surprisingly, wheat after oats is not a bad rotation. Very few of the diseases cross over between oat and wheat. Go for it!

### After Barley

Wheat after barley is quite different than oats. Many of the root diseases cross over between barley and wheat. This is only a fair rotation at best. Management options are the same as with wheat after grass hay. Don't plant early, and use seed placed potash.

### After Wheat

This is the worst choice of all. Leaf disease and root disease pressure will be at its maximum. You will need to spray for leaf diseases. Take-all, Eyespot and Cephalosporium stripe are all risks that there is no way to manage. Count on a minimum of a 10% yield loss. In 2008, some wheat on wheat fields had over 30% Take-all infection. Know the risk!

### Soft White

How many times do we need to sing this song? If the premium for soft white looks intriguing, remind yourself of the risk of sprouts! Be sure you add in drying costs to your calculations. Successful soft white growers don't wait for dry wheat. Finally - DO NOT grow more soft white than you can combine in two days. Period.

Does all this mean we planted too much wheat in the fall of 2007? **NO!** With over 2 million acres of soybeans, there is lots of opportunity for more wheat. We just have to get those beans harvested in decent time! Plant WHEAT!!

## How Little Fertilizer Can You Get Away With For Wheat?

by Keith Reid, Soil Fertility Specialist & Peter Johnson, Cereals Specialist, OMAFRA

Record fertilizer prices have many farmers asking how little they can get away with, or whether they should be applying fertilizer at all? The answer would be simple if every field responded to fertilizer in the same way. The reality of agronomy is that response to any input is variable, so we are always playing the odds. Fortunately, it's a gamble that pays back more often than not. However, we should be managing our fertilizer program to pick a winner as often as possible. It is doubly important this year, because grain prices are also very attractive. You don't want to miss out on opportunities for increasing yields.

### Short Term Considerations - Starter Response

Winter wheat is very responsive to high levels of phosphorus near the seed. Unless your soil tests are way up there, you can expect a kick of 3 to 7 bushels from starter fertilizer. The amount you need to add to get this increase must be high enough to raise the concentration in the seed band, but it only needs to carry the plant until it has a well established root system. Don't go any lower than 15 lbs/ac (17 kg/ha) P<sub>2</sub>O<sub>5</sub> as a starter - 30 lbs/ac (34 kg/ha) of MAP, 5 gal/ac (11.3 litres/ha) of 6-24-6, or 3.5 gal/ac (39.4 litres/ha) of 10-34-0.

### Medium Term Considerations – Meeting This Crop's Requirements

A winter wheat crop with a well established root system can pull enough P and K out of the soil to carry it through to maturity, IF there is enough in the soil to start with. If your soil test is low for either of these nutrients, then it will pay you to add them as either fertilizer or manure. You can do this by broadcasting, or by increasing the amount applied through the drill. Watch out for the maximum safe rates, which are 13.5 lbs/ac N (15 kg/ha) or 27 lbs/ac N + K (30 kg/ha) of N+K if all of it is going to be banded.

### Long Term Considerations – Crop Requirements Over the Rotation

A 100 bushel wheat crop will remove about 60 lbs/ac (68 kg/ha) of phosphate and 35 lbs/ac (40 kg/ha) of potash. If the straw is removed it will remove 70 lb/ac (79 kg/ha) phosphorus and 120 lbs/ac

(135 kg/ha) of potash. If you rely solely on only 15 lbs/ac (17 kg/ha) of P<sub>2</sub>O<sub>5</sub> in your starter, your soil fertility levels will eventually decline. You will need to assess for your own farm whether there are other sources of nutrients that will help to make up this shortfall, or where it makes the most sense for you to be operating on the scale from build-up to drawdown of soil fertility.

It still makes sense to use low rates of starter fertilizer on wheat. Even at current phosphorus prices, yield increase will often cover the cost of these applications. Long term, consideration must be given to the soil bank account, and what strategy will keep high yields coming down the road.

## Controlling Alfalfa in Minimum Till Cropping Systems

by Mike Cowbrough, Weeds Specialist, OMAFRA

Retiring an established alfalfa crop in minimum tillage cropping systems can be challenging. Often the biggest reason for poor control of an old alfalfa crop is that the appropriate herbicide rate is not used and the timing of application is not optimal.

### Treatment Options and Rates

Glyphosate (eg. Roundup Weathermax, Touchdown Total) is the most common active ingredient used for control of alfalfa. However, producers have observed that glyphosate applied alone will sometimes offer inconsistent alfalfa control and the addition of 2,4-D Ester improves control.

Demonstration trials at Kemptville College (University of Guelph) in 2008 provided a comparison of different glyphosate tank-mixes compared with glyphosate alone. Over two hundred participants at the Eastern Ontario Crop Diagnostic Day were asked to select the treatment which they felt provided the best control of alfalfa. The tank-mix of glyphosate + 2,4-D Ester proved to be the winning treatment (Table 1 and Figures 1,2 & 3). Glyphosate applied alone will often result in re-growth the next spring, particularly when low rates (i.e. 0.67 L/ac) are used.

**Table 1.** Control of established alfalfa 4 weeks after application with several glyphosate tank-mixes.

Treatment	Rates	Votes	Control
glyphosate (540 g/L)	1 L/ac	0%	70%
glyphosate (540 g/L)	2 L/ac	44%	90%
glyphosate (540 g/L) + 2,4-D Ester (564 g/L)	1 L/ac + 0.5 L/ac	52%	90%
glyphosate (540 g/L) + amitrole	1 L/ac + 1.68 L/ac	4%	80%
Guardian (glyphosate + Classic)	0.67 L/ac + 14 g/ac	0%	70%

Source: J.E. Shaw and R.H. Brown, 1989



Figure 1. Visual control of alfalfa 4 weeks after an application of glyphosate (540 g/L) at 1 L/ac.



Figure 2. Visual control of alfalfa 4 weeks after an application of glyphosate (540 g/L) at 2 L/ac.



Figure 3. Visual control of alfalfa 4 weeks after an application of glyphosate (540 g/L) at 1 L/ac + 2,4-D Ester (564 g/L) at 0.5 L/ac.



Figure 4. Untreated Control

**Table 2.** Visual Control of Alfalfa with Fall and Spring Applications of glyphosate and 2,4-D Ester in Ridgetown, ON.

Treatment	Timing	Rates	Control
glyphosate (540 g/L)	Fall	1.34 L/ac	89%
glyphosate (540 g/L)	Spring	1.34 L/ac	60%
glyphosate (540 g/L) + 2,4-D Ester (564 g/L)	Spring	0.67 L/ac + 0.85 L/ac	98%

### Application Timing - Fall or Spring?

Fall glyphosate applications provide significantly better control of alfalfa than spring applications (Table 2). If a fall herbicide application cannot be accommodated, then the addition of 2,4-D Ester to glyphosate in the spring will improve control (Table 2). The limitation of applying 2,4-D Ester with glyphosate in the spring is that on the current glyphosate label, you are limited to planting only spring cereals, not underseeded to legumes and at a 14 day pre-plant interval.

The University of Guelph recently published the results of a 3 year study which evaluated pre-plant 2,4-D Ester applications to soybeans. They found that applications of 0.5 L/ac of 2,4-D Ester (564 g/L) applied 7-14 days pre-plant caused no crop injury and grain yields equivalent to the weed-free control plots<sup>1</sup>. However, this application timing is currently not listed on the glyphosate label.

### Summary

- Fall herbicide applications provide the best control of alfalfa in minimum tillage cropping systems.
- The tank-mix of 2,4-D Ester + glyphosate applied to alfalfa in the fall often improves control and reduces the likelihood of re-growth in the spring.

<sup>1</sup>Soltani et al. 2008. Effect of amitrol and 2,4-D applied at the preplanting and pre-emergence of soybean. Weed Biology and Management. Vol 8. pp 139-144.

### Soil Testing Myths

*by Keith Reid, Soil Fertility Specialist, OMAFRA,*

There are a number of misconceptions floating around out there that keep us from getting the best value from soil testing. In some cases, they mean that samples don't get collected at all. This is a total waste of valuable information you could use to improve your bottom line.

**Myth - My farm is unique, so a soil test can't be relevant.**

Fact - While it is true that there are differences from farm to farm in how effectively nutrients are used, the soil test is the only reliable way to get information about the concentration of nutrients in your soil. You can manage your unique situation better if you have this information.

**Myth - You have to grid sample to get good information.**

Fact - We are more aware of within-field variability today, but the value of quantifying this variability is limited. The first step should always be a good field scale sample (maximum 25 acres).

**Myth - I grow good crops, so I don't need soil tests.**

Fact - Good for you! This probably indicates that nutrient deficiencies are not a problem, but that there may be opportunities to save money with lower fertilizer rates on some fields.

**Myth - Water is the best extract, because it shows what is immediately available to the crop roots.**

Fact - This is one of those attractive theories that just doesn't work in reality. The water extract, despite the claims, is not at all the same as the concentration in the soil solution. This is because it involves shaking a soil sample in a soil/water

slurry, that is a much higher amount of water than a root could ever grow in. It also ignores the contribution of exchangeable and slightly soluble nutrients from the soil, which account for most of the plant uptake during the growing season.

**Myth - Other provinces/states use “better” extractants.**

**Fact -** Soil test extraction is a complicated dance between the chemistry of the soil and the extractant, in an attempt to mimic the availability of nutrients to the crop over the growing season. The extractants chosen for Ontario work well with our soil types. Others are better suited to the conditions in their particular areas.

**Myth - Fertilizer recommendations from soil tests are only for average crops.**

**Fact -** Soil fertility is only one small part of growing high yielding crops, and crops with a high yield potential will have large root systems that are very efficient at absorbing nutrients from the soil. Fertilizing using soil test recommendations will not limit crop yields.

**Myth - The soil test reports are too hard to understand.**

**Fact -** Soil test labs are trying to add more value to the soil test by including more interpretations of the results on each report. Unfortunately, this does sometimes have the effect of making the important information harder to find. School yourself to concentrate on a few key numbers (soil pH, extractable P, K & Mg), and interpreting the test results becomes much simpler.

## Soil Management Tips For Late Summer and Early Fall

*by Adam Hayes, Soil Management Specialist –  
Field Crops, OMAFRA*

### 1. Scout fields for soil erosion.

- The heavy downpours or significant rainfall on already saturated soils this year caused soil to move.
- Before pulling the combine into the field this fall, check fields and along ditches for small gullies and washouts. Be on the lookout for tile problems.
- Assess the situation for causes of soil erosion to determine if management changes (such as more residue cover) are required, or

if an erosion control structure is needed.

### 2. Be aware of soil compaction problems.

- Rainfall events during cereal harvest this summer often meant that the combine and grain buggies were traveling on the field in less than ideal conditions.
- This led to rutting and compacted areas in the field.
- Assess the compaction in these areas and consider management options.

### 3. Consider options for preventing soil compaction.

- Many soils may be wetter going into the fall this year, so more prone to soil compaction.
- Refer to the soil management [www.omafra.crops](http://www.omafra.crops) for more information on the detection and prevention of soil compaction.

### 4. Don't use deep tillage if you don't have a problem.

- If soil compaction has been confirmed and not too deep, deep tillage may be able to correct it.
- This year, soils may be too wet for deep tillage to be effective. Check soil moisture to the depth of tillage to determine if it is dry enough to shatter.
- Research has shown that if there is no compaction, deep tillage will not increase yields.

### 5. Manage the soil to increase or maintain organic matter levels.

- Organic matter is the most important part of the soil.
- Organic matter plays an important role in soil structure, nutrient cycling and availability, water holding capacity, and drainage. All of these can impact yield.
- Add organic matter through the addition of manure, biosolids, composts, crop rotation, and cover crops.
- Minimize organic matter loss.

### 6. Avoid excessive tillage of cereal stubble.

- If you plan to no-till into wheat residue, cutting the straw short and removing it will improve results.
- Growing cereals in the rotation improves soil structure and adds much needed soil organic

matter. Manage the residue to help prevent erosion, and also so the soil will dry and warm up in the spring without losing much organic matter or soil structure.

- Disking or strip tillage are a good compromise option.
- Moldboard plowing or chisel plowing and the associated secondary tillage can undo a lot of the good from the cereal crop. Excessive tillage of any kind depletes organic matter and leaves the soil exposed and prone to soil erosion.
- On the other end of the spectrum, some growers have had success with only coulters tillage.

#### 7. Manage red clover wisely.

- Try to leave the red clover until the end of September or early October for the most benefit.

### Tips For Making Marketable Hay Without Rain-Damage or Mould

by Joel Bagg, Forage Specialist, OMAFRA

The year 2008 will long be remembered as the year when it was almost impossible to make dry hay without getting some rain on it. With almost daily rains and lack of sunshine, suitable hay making weather “windows” were either extremely narrow or non-existent. Rain-damaged hay is typically lower in soluble sugars and higher in fibre, discoloured, mouldy, dusty and less palatable to livestock. Hay baled “tough” also presents the risk of heating in storage. “Horse quality” hay made without rain-damage or mould is extremely short in supply, and trading for very high prices.

Fast drying of hay in the field is the goal. The obvious benefit is to get the hay successfully made and under cover before the next rain. Fast drying also minimizes respiration losses, microbial growth in the windrow, and maximizes sugars, green colour, and palatability.

There are many different ways to successfully make quality hay. Even so, some hay producers are more successful than others. These craftsmen apply the “art” as well as the science of hay making. If you look around the province, you can

observe hay producers that focus on quality for horse hay and other export markets. Watch closely what these pros are doing that others are not, that makes their batting average higher when it comes to making a premium hay product. It is all about attention to details. Here is a short list.

#### Hay Making Capacity

Hay making technology has changed a great deal to give us the capacity to cut, rake, bale and store a lot of hay when the weather windows of opportunity present themselves. The pros have that capacity.

#### Cut A Wide Swath

Leaving the swath as wide as practical takes the maximum advantage of the drying effects of the sun and wind. Narrow swaths take longer to dry. Humidity inside a tight, narrow swath is very high and not conducive to fast drying. Most haybines have an easy swath width adjustment. Some of the pros go as far as setting their tractor tires as wide as possible to avoid driving on a wide swath.

#### Proper Conditioning

Proper maintenance of both roll and flail conditioners is important to ensure adequate conditioning, without over-conditioning. Check your Owner’s Manual. Rubber rolls wear with use and eventually under-condition if not adjusted. In a survey done in the machine sheds of some Wisconsin hay producers, half of the conditioners exceeded the maximum roll clearance spacing required for adequate conditioning.

Some of the pros also use more intensive super conditioners, macerators and reconditioners to achieve more aggressive conditioning and faster drying. This also results in a softer textured hay. A super conditioner, replacing the need for a conventional conditioner, uses adjustable airbags with high pressure rubber rolls to crush the stems their full length, rather than crimp and break the stems every 2-4 inches. Macerators and reconditioners are used after initial drying with another trip around the field to achieve further conditioning.

#### Strategic Raking

The rotary rake seems to be the standard tool for windrow management used by the pros. Parallel bar and wheel rakes tend to result in “roping” and don’t break up clumps and provide as much

fluffing effect as a rotary rake. Tandem axle rotary rakes ride the ground more evenly with less contact with the ground. Raking at no less than 40% moisture minimizes leaf loss. Some adjust their rotary rakes to give a slower rotary speed, which also reduces leaf loss.

Tedders are sometimes used at higher moistures to speed up drying by spreading the crop over the entire surface area. Tedders can result in high leaf loss with legumes, but much less so with grasses.

Because leaf losses can be high when raking that “almost ready to bale hay”, windrow invertors can be useful to gently move the bottom of the swath to the top to achieve that last bit of necessary drying.

### **Make The Right Bale**

Small square bales fetch the highest prices per lb, but require a lot of labour or investment in handling equipment (accumulators and grapplers) to get them into storage. Small squares are somewhat limiting in their capacity to get a lot of hay made in a narrow weather window.

Large round bales are not as attractive to non-local buyers and are discounted in price, because they are more difficult and more expensive to transport. They typically don't move farther than a tractor and wagon can comfortably take them.

There is a growing market for large square bales. Large squares have the significant advantage of easier trucking to non-local domestic and export markets. They also have the advantage of giving the producer the capacity to make a lot of hay in a short period of time. A recent innovation is the reprocessing of a large square bale into small squares by hydraulically cutting and retying them. This combines the advantages of harvest capacity and mechanization of large squares with the market appeal of small squares.

### **Propionic Acid**

Large square bales are more dense, so it can be very difficult to get this hay dry enough to avoid mould and heating without the use of propionic acid hay preservative products. For this reason, moisture sensors with computerized applicators are usually standard on large square balers. High application rates result in oxidization and browning that makes the hay less marketable. While there has been some resistance to propionic acid in the

horse hay market, there is growing market acceptance, some of it from necessity.

### **Under Cover & Off The Ground**

Getting hay stored properly is often a weak link in hay production. Large squares absorb moisture from the ground, so bales should come off the field the same day they were made. Bales should be stored under cover and off the ground. Skids or a layer of old hay can be used. Ventilation is important while bales lose their moisture to a safe level, so stacked large square should be stored with space between. To have good market acceptance, bales should be green on all sides, so avoid sun bleaching. “Green sells hay” is a market reality.

### **Forage Focus**

The topic “The Craftsmanship Of Successful Hay Making” will be discussed in more detail by Fritz Trauttmansdorff, Dunlea Farms, at this year's Forage Focus Seminars, sponsored by the Ontario Forage Council. Forage Focus is tentatively scheduled for December 2<sup>nd</sup> at Winchester and December 3<sup>rd</sup> at Shakespeare.

## **Understanding Pasture Gains in a Wet Year**

*by Jack Kyle, Grazier Specialist, OMAFRA*

In a year with plentiful rainfall, pastures remain lush and continue to grow throughout the summer. It is always encouraging to see green grass in August, rather than having all fields brown and needing to feed hay. Pasture gains in these wet years are often a little disappointing. One would think that with all the lush grass and high quality feed available all season, gains should be excellent, but this is not necessarily the case.

To understand why this happens we need to look at how an animal eats on pasture. Cattle bite at about 15 bites per minute for 6 - 10 hours per day. Body fill is the main factor determining when they quit eating. In a year with adequate rainfall, the dry matter (d.m.) content of the grass is lower - likely in the 15 - 20% range. In a drier year, the grass may have a dry matter content of 20 - 25%. If an animal grazes for 8 hours per day at 15 bites per minute, this represents 7,200 bites each day (15 bites/minute X 60 minutes X 8 hours).

### Pasture Moisture Limits Dry Matter Intake

As an example, a 400 kg animal on pasture requiring 2.5% of body weight in dry matter intake for maximum growth would need to consume 10 kg of dry matter per day. If each bite size is a typical 7 grams and this animal is going to take 7,200 bites per day, then it will consume 50.4 kg of pasture (7,200 bites X 7 grams).

If the pasture is 20% dry matter (typical of a normal year), this 50.4 kg represents 10.8 kg of dry matter and the animal has met their nutritional needs.

If this pasture was lush and had 15% dry matter (typical of a wet year), then our beast would consume only 7.5 kg of dry matter (50.4 kg X 15% d.m.). This falls short of its dietary needs. Under this scenario the animal needs to consume 66.6 kg of pasture to meet their optimum needs. This means either eating for longer (more bites), or not meeting its energy needs and having less than optimum growth.

In a dry year, when the pasture would have 25% dry matter, this same animal would consume 12.6 kg of dry matter (50.4 kg X 25% d.m.), well above the requirement of 10 kgs. This animal could either graze for fewer hours and still meet its

requirements, or graze for the same time and have exceptional gains.

In a wet year it takes more hours of grazing to meet the dietary needs than it does in a dry year, assuming adequate forage is available.

### An Analogy

To see this in another way, it is like sitting down to a meal that is a big bowl of soup. Across the table from you is a person with a bowl of stew. You both have the same sized spoon. Who is going to feel full or satisfied first? The person eating stew will. Can you get enough nutrition from the soup? Yes, but only if there is a second or third bowl offered and you have longer to eat your meal.

### Copper on Winter Wheat Project

by Scott Banks, Emerging Crop Specialist, OMAFRA

The application of copper has been promoted to improve disease resistance of wheat, and ultimately to improve grain yield and quality. In 2008, the Quinte Regional Soil & Crop Improvement Association initiated a project to evaluate the use of foliar applied copper with the herbicide on winter wheat for cereal leaf and grain

### Results

**Table 1** – Yield Effects of Foliar Copper Application on Winter Wheat (Quinte Regional Soil & Crop Improvement Association, 2008)

Site	Soil Test pH	Organic Matter %	Soil Test Cu (ppm)	Leaf Analysis Copper (ppm)	Leaf Analysis Calcium (%)	Variety	Treatment	Treatment Average Yield @14.5% (bu/ac)	Difference Yield @14.5% (bu/ac)
1	7.5	3.9	2	8.34	0.76	Emmit	Copper	73.8	
1	7.5	4.4	2	7.93	0.77	Emmit	No Copper	82.9	-9.1
2	5.5	3.5	1.3	6.46	0.59	Pioneer 25R47	Copper	34.3	
2	5.3	3.1	1.2	4.78	0.51	Pioneer 25R47	No Copper	35.6	-1.3
3	6.2	4.8	1.4	7.23	0.62	Pioneer 25R47	Copper	64.5	
3	6.4	5	1.7	7.11	0.63	Pioneer 25R47	No Copper	64.1	0.4
4	6.5	3.8	1.7	4.83	0.54	Pioneer 25R47	Copper	105.3	
4	6.6	3.8	1.7	4.98	0.49	Pioneer 25R48	No Copper	106.5	-1.2

\*Critical Deficiency Levels – a nutrient is deficient when the nutrient concentration falls below the critical level and would expect a yield response to applying that nutrient.

Soil Test Copper = 1 ppm (DTPA extractable. 0 - 6" depth)

Leaf Analysis Copper = 3 ppm

Leaf Analysis calcium = 0.25%

disease control, and to measure the impact on yield. Soil samples and leaf tissue samples were collected. Visual disease comparisons were made during the growing season.

### Summary

Visual ratings taken during the growing season observed similar disease present on both the untreated and treated plots at low levels. The soil samples for copper were above the critical deficiency of 1 ppm at all the sites. Organic matter was generally high at all sites. From the leaf tissue analysis, both copper and calcium levels were above the critical deficiency levels. The 2008 yield results showed little to no advantage to foliar applied copper. For a quality comparison, grain samples are currently being graded and analyzed for toxin levels.

## Combine Cleaning Procedure

*by Hugh Martin, Organic Specialist, OMAFRA*

When harvesting organic crops it is very important to make sure the equipment is clean, especially when moving from non-organic to organic fields (for example custom operators). If possible, use combines that are dedicated to organic production only. If that is not possible, use combines that are dedicated to non-GMO crops. When that is also not possible, take the time (possibly several hours) to thoroughly clean out the combine. Here are some ideas:

1. Consult the Owner's Manual on cleanout procedures, access doors, component disassembly, and safety procedures.
2. Choose a suitable location for the cleanup.
3. Collect appropriate safety gear – eye protection, dust mask, gloves, hard hat, ear protection.
4. Evaluate appropriate cleaning equipment for each area - air compressor with wands, shop-vac, leaf blower, large tarp, broom/whisk broom/steel brush, screwdriver, and other tools as needed.
5. Run discharge auger two minutes, or until grain tank and auger are clean.
6. Drive combine across end rows to dislodge grain before moving to cleanout area.
7. Remove grain head making sure to safely secure the feeder house with cylinder stops.
8. Move combine to cleanout area.

9. Place tarp under combine to capture the grain being removed.
10. Inspect and clean cab roof.
11. Lower feeder house and clean inside and outside. Pay special attention to areas where grain or weed seeds may catch.
12. Raise feeder house and clean stone trap and remove all material.
13. Clean grain tank, remove grain from top and bottom augers, ledges, corners. Consider flushing unloading auger with other material, such as wood chips.
14. Clean the cylinder or rotor and concave threshing area and separating area by opening all access doors identified in owner's manual and removing all material.
15. Clean the straw walkers (if equipped). Open all access doors. If you must enter this area, consult owner's manual on safety precautions and use a rubber mat or carpet to lay on.
16. Clean tailings and grain elevators by opening bottom access doors and removing grain. Empty and cleaning the moisture sensor if equipped.
17. Clean the cleaning shoe area by removing chaffers and sieves for easier access, or opening and closing the sieves several times to loosen debris and remove grain. Access and empty lower grain cross-augers as far as possible.
18. Clean rear axle, chopper and spreader areas to remove all grain and plant debris.
19. Replace all safety shields, making sure all elevators have been reassembled and all doors and openings are closed and fastened.
20. Clean the grain platform by removing stems and grain from cutter area, under platform auger and reel. Check inside auger area via inspection plates if present. Clean under side shields.
21. Clean the corn head by removing all stalks, ears and loose grain. Lift shouts and vacuum to remove grain and other plant debris.
22. Consider flushing combine with the next grain crop to clean the unloading auger before collecting grain from the field.

(Adapted from Combine Cleanout Procedures for Identity Preserved Corn and Soybeans, Iowa State University, 2003.)

## Kent Rainfall Summary 2008 (mm)

NAME	RR	ADDRESS	TOTAL	APR	MAY	JUN	JUL	AUG
<b>Brown, Dick</b>	1	Morpeth	299	28	60	91	65	55
<b>Cuthbertson, Morris</b>	3	Chatham	379	49	60	135	87	47
<b>Demers, G.</b>	7	Dresden	212	50	75		54	33
<b>Farquharson, Robert</b>	1	Tilbury	330		61	173	55	41
<b>Fraser, Barry</b>	2	Chatham	321		83	139	99	
<b>Heyboer, Marinus</b>	2	Highgate	312	39	73	96	55	49
<b>Johnston, Watson</b>	2	Kent Bridge	422	7	64	132	118	102
<b>Johnstone, Bruce</b>	8	Chatham	97	30	67			
<b>Morden, Gerald</b>	1	Muirkirk	282	13	67	99	59	45
<b>Nauta, Marg &amp; Randy</b>	2	Merlin	339	25	73	144	54	43
<b>Taves, Ernie</b>	1	Wheatley	288		86	98	88	16
<b>VanSegbrook, Dave</b>	3	Tupperville	347	24	83	117	81	43
<b>Weaver, Charles</b>	7	Chatham, Ont	433	53	78	144	103	54
		<b>Total Average</b>	<b>312</b>	<b>32</b>	<b>71</b>	<b>124</b>	<b>76</b>	<b>48</b>

### Kent Federation of Agriculture Regional Meeting

September 24, 2008 - 6:30 PM

Roesch Meats and More

### Local Food for Local Tables – Growing Food Security For Southwestern Ontario

November 27, 2008 - 8:30 AM

Brescia University College, 1285 Western Road, London

Contact - Mary Yanful, 519-432-1801;

[mary@lcrc.on.ca](mailto:mary@lcrc.on.ca)

### “Round the County Farm Tour” Tour of SW Chatham-Kent

September 28, 2008 - 10:00 AM

Contact - Kathy Delanghe, 519-674-1595

[kent@ofa.on.ca](mailto:kent@ofa.on.ca)

### Southwest Agricultural Conference

January 6, 2009 to January 7, 2009

Ridgetown Campus, University of Guelph

Contact - Luanne Brien 519 674-1596

[www.southwestagconference.ca](http://www.southwestagconference.ca)

### 3rd Annual Community Energy Forum

November 8, 2008 - All Day Event

Sarnia, Lambton College

Contact - Maike Luiken, 1 519 542-7751 x 3229

[www.bluewatersustainabilityinitiative.ca](http://www.bluewatersustainabilityinitiative.ca)

### FarmSmart Agricultural Conference

January 17, 2009 - All Day Event

University of Guelph

[www.uoguelph.ca/farmsmart](http://www.uoguelph.ca/farmsmart)

### 58th Annual Essex County Bounty of the County Trade Show

November 18, 2008 to November 19, 2008 - All Day  
Leamington Kinsmen Recreation Complex, 249 Sherk St.

Contact - Essex County Associated Growers, 516-326-1181

### Managing Excellence in Agriculture conference

January 28, 2009 to January 30, 2009 - All Day Event

Niagara Falls

[www.farmcentre.com/EventsAnnouncements/Events/ManagingExcellence](http://www.farmcentre.com/EventsAnnouncements/Events/ManagingExcellence)

### Great Lakes Community Shared Agriculture Conference

November 21, 2008 to November 23, 2008 - 1:00 PM -

Orillia [www.csaconference2008.ca](http://www.csaconference2008.ca)

### OSCIA Annual Meeting

February 3, 2009 to February 4, 2009

Sheraton Fallsview Hotel, Niagara Falls

[www.ontariosoilcrop.org](http://www.ontariosoilcrop.org)

**Upcoming Events**

## Cooperators Needed for the Improving Yield Of Second Year Soybeans Project!

The St Clair Region Soil and Crop Improvement Association is looking for cooperators to participate in the third year of the "Improving Yield Of Second Year Soybeans" project. The objective of the project is to determine the value of later season winter rye and winter wheat crops for multiple years of soybeans. The benefits of the cover crop are assessed through yield, soil quality measurements and disease assessments.

Occasionally, it necessary to grow more than one year of soybeans in a row. Crop rotation improves yields and helps to break pest cycles. Second and third year soybeans yield lower than first year. It is hoped that planting cover crops after soybean harvest will improve the yield of the soybeans the following year.

### Project requirements:

- Plant two to three reps of one of the cover crops (winter wheat or rye) leaving check strips beside each strip soon after soybean harvest in a field that will be going back into soybeans;
- Kill off the cover crop in the spring, and
- Plant the field into soybeans.

Then—harvest the soybeans, recording the yield where both the check and cover strips were.

**We are looking for cooperators in the Essex, Kent and Lambton area for this project!** Three sites (one per county) will be a little more intensive and the rest (4 per county) will be simple comparisons with the cover crop. Benefits to the cooperator include some compensation for their effort as well as soil fertility, soil quality, soil texture and disease assessments on the project field.

If you would like to be a cooperator or are interested in more information please contact Adam Hayes at (519) 674-1621, Henry Denotter (519) 733-2656 in Essex, Earl Elgie (519) 683-4659 in Kent, Don Van Gorkum (519) 849-6824 or Roy Searson (519) 849-3914 in Lambton.

Grants of up to **\$10,000** per farm are available

**CALL NOW!**



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Management  
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### Grants Available for:

- Tree planting
- Stream stabilization
- Wetland creation
- Buffer strips
- Sediment Traps
- Repair/replacement of faulty septic systems
- Fencing cattle from watercourses
- Well decommissioning

MORE @ [www.scrca.on.ca](http://www.scrca.on.ca)

St. Clair Region Conservation Authority  
205 Mill Pond Cres.  
Strathroy, Ontario, N7G 3P9



Call Steve Shaw at 519-245-3710 and ask how you can get your farm a piece of the *action!*