Breaking Ground
(in Northeastern Ontario) SUMMER 10

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

2010 Earlton Farm Show

by Kelly Bird, NEOSCIA Intern

College Boreal staff promote their course in dairy management at the 2010 Earlton Farm Show

This year's farm show was held on April 9th and 10th at the Earlton Arena, and thank-fully, it was more or less snow free. This year's trade show had seventy-three exhibitors, with a variety displays featuring information about solar panels, GPS units, insurance and so on. The 2010 Earlton Farm show also featured many new exhibitors such as Nana's Kettle Corn, Marcrest Manufacturing, Cook Engineering, Sherry's Preserves, Sun North Systems and so forth.

Over the course of the two days approximately fifteen hundred people went through the doors, ranging in age from three and younger to sixty plus. Visitors to the event came from the Milton area to Timmins, and Algoma to North Western Quebec. However, most visitors were from Temiskaming Shores, Earlton, Englehart and the surrounding area.

This year, the maple syrup festival was run by 4-H as fundraising event for them. The pancake Saturday Morning breakfast was also a great success, as per usual. Saturday afternoon featured a panel on Biomass with the following speakers: Ross MacLeod (Sault Ste. Marie Innovation Center), Dennis Widdifield (Cook Engineering), Ian McDonald (OMAFRA Biomass Specialist), Greg Zimmerman (Lake Superior University) and Don McCabe (OFA). In addition, forage sessions were held Saturday morning featuring the following speakers: James Parsons (2009 Ontario Forage Master) and Mario Monegon (OMAFRA Livestock Specialist).

The winner of this year's Golden Pitch Fork went to Temiskaming District. Double Ridge Farms (Temiskaming) dominated the forage and seed show, taking first place in five categories. Gerald Beaudry (Nipissing) also placed highly and consecutively in many of the categories as well. To see a full list of all the winners, please visit North Eastern's NEW website www.neoscia.wordpress.com.

A special thanks goes out to Kevin Pratt for laying down the floor, clean-up and the tedious job of set-up and tear down. The event would have not been a success without you and the other volunteers. Once again, thank-you for your time and assistance; it not go unnoticed.

Earlton Farm Show 2011 tentative dates are April 8th and 9th. Some new and exciting surprise changes will be taking place and will be guaranteed to not go unnoticed. So do not forget to save the dates for next year's show! See you there!

NOTE: ***Sponsors/Advertisers needed for coming year. $500 for 4 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.

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OBITUARY

Hedley Blackburn (1916-2010)

A 71 year member of the Cochrane Soil & Crop Improvement Association, Hedley Blackburn died on March 12, 2010 at the Lady Minto Hospital. A life-long farmer, (from the age of 12), Hedley was active and attended recent CSCIA meetings. In 2009, he was recognized as one of a trio of Cochrane farmers who were the only surviving, inaugeral members of the Provincial OSCIA that have been consistently enrolled since the inception of the organization in 1939. He is interred at the Cochrane Civic Cemetary.

COMING EVENTS

Ag Centre Crop Tours

On July 14, join Terry Phillips on the Bayer Dead Weeds Tour in Temiskaming. See new technology and get an update on new fungicide chemistry for cereals and canola. Then take a private tour at C&M Seeds test plots to take a look at new varieties of wheat.

Then on July 15, travel with Terry to the Ontario Canola Growers Assoc. Crop Production Center at Shawridge Farms (Arthur, ON). Take a look at new varieties and production techniques in a high yield environment. This is your chance to rub shoulders with some of the top producers in the Province.

For both events, please RSVP:
Terry Phillips c/o Temiskaming Ac Center (705-647-6639)
or Email him at <agcenter@parolink.net>

TEMISKAMING CROP TOUR

JULY 22 (see page 3)

COMING EVENTS

Sudbury Summer Crop

by Mack Emiry

Farmers from across North Eastern Ontario and other interested persons are invited to join Sudbury District Soil & Crop Improvement Association for a crop tour on August 6 in the "Valley" area (north of the City of Sudbury).

We will gather at Sudbury Downs race track between 9:30 and 10:00 A.M. Buses will leave sharp at 10 to take us to our first stop to view a "Green Mines/Green Energy" project. This reclamation project features crops being grown for energy production on mine tailings which have been amended with paper mill sludge.

Our lunch stop will be at Beaulieu Farms which is a berry and produce operation. Next we will visit a large potato farm which includes a processing and packing operation. The final visit of the afternoon is to an elk farm. This farm is also the location of a Sudbury Crop Improvement Association project in 2008 which featured various soil amendments. There will be an opportunity to see if any of the visual effects of these amendments are still evident. We then finish the day at "market Square" in downtown Sudbury for a barbeque.Please mark your calendars for this informative event!

Ministry of Agriculture
Food and Rural Affairs

Ontario

OMAFRA CONNECTS

Your Link to Ontario Agriculture

Northern Ontario Regional Office - Phone: 1-800-461-6132 Fax: 705-594-9675

Edited by: Pierrette Desrochers, Agricultural Representative (with Brian Bell and Dan Tasse)

Highlights in Brief:

- OMAFRA's regular field crop reports available here: http://www.omafra.gov.on.ca/english/crops/field/reports/index.html
- Information on Harmonized Sales Tax for Ontario 's Farmers: http://www.omafra.gov.on.ca/english/busdev/facts/HSTbenefits.htm
- Use the Foodland Ontario logo at no charge: http://www.foodland.gov.on.ca/english/industry/ind-foodland.html#foodlandlogoinfo
- Young and New Workers: Are Yours Ready? http://www.labour.gov.on.ca/english/hs/pubs/new_workers.php

LOCAL EVENTS FOR NORTH EASTERN ONTARIO

July 2nd - Information sessions on Solar Energy

The University of Guelph – Ridgetown Campus is hosting an information session on Solar Energy. Thomas Boehni will provide a checklist specific to improving efficiencies of solar systems and what to look for when shopping for a system.

7:00 pm – 10:00 pm Joe's Steak and Pasta – Quality Inn, New Liskeard

Cost is $10 (advance reg. & $15 (at the door).

Registration can be completed:

Online at www.ridgetownc.com/solar;

by phone Dezarae Malott at 1-877-480-9992;

by mail – University of Guelph – Ridgetown Campus, Attention D. Malott, 120 Main Street East , Ridgetown , ON N0P 2C0

July 22nd - Temiskaming Crop Coalition Summer Tour:

4 pm - Social at Koch Elevator (Earlton)

5 pm - Supper

6:30 pm - Bus tour of forage, canola, grain and white bean test projects

August 19th - Temiskamig Cattlemen's Association Summer BBQ - Harley Hall.

Guest Speakers:
Nancy Noecker (OMAFRA),

Dan Ferguson (Ontario Cattleman's Association on Golf Clubs),

Scott Honey (Brighton Beef Producer on pasture management)

August 20th - Cochrane Beef Night

With Nancy Noecker & Tom Hamilton of OMAFRA. Location TBA

PROVINCIAL EVENTS

July 7th- 8th: Southwest Crop Diagnostic Days

Ridgetown 519-674-1690

For more information: www.diagnostic-days.ca

July 20th: Eastern Ontario Crop Diagnostic Day

Winchester Research Farm, Kemptville Campus

For more information: Eastern Ontario Crop Diagnostic Days

September 14th-16th: Canada's Outdoor Farm Show

For more information: www.outdoor-farmshow.com

September 21st-25th: International Plowing Match

For more information: www.ipm2010.com - St. Thomas

UPDATES

1. Attention Maple Syrup Producers!

As part of Ontario 's Open for Business initiative, OMAFRA is seeking stakeholder input on its proposal to modernize Regulation 386 – Maple Products under the Farm Products Grades and Sales Act.

A notice of the proposal was posted today on the government's Regulatory Registry. The Registry website, http://www.ontario-canada.com/registry/, provides a link to an OMAFRA webpage where the stakeholder information paper and relevant legislation

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is available. The information paper provides a description of the proposal and sets out the ways feedback can be submitted to the ministry. Comments and feedback must be received by July 16, 2010.

2. Do you operate a small-scale farm? Have your say!

The Canadian Agricultural Human Resource Council is researching the labour needs on farms with less than $100,000 in gross receipts. Your responses will be used to better understand employment needs of smaller farms and will ensure that operations from Ontario are represented in the research.

Go to www.cahrc-ccrha.ca or call CAHRC at 1-866-430-7457 ext. 228 to complete the survey by phone. All respondents can enter for a chance to win $100

3. Premier's Award and Minister's Award Winners Named for Agri-Food Innovation Excellence

The innovations of 55 regional winners, who will receive $5,000 each, will be announced at regional award ceremonies this spring. For more information, please see: http://www.omafra.gov.on.ca/english/infores/releases/2010/041210.htm

4. Employment Insurance Benefits for Self-Employed People

Beginning in January 2011, self-employed Canadians will be able to access Employment Insurance (EI) special benefits.

For more information, visit: http://www.servicecanada.gc.ca/eng/sc/ei/self_employed_workers.shtml

PROGRAMS, SERVICES and RESOURCES

- OMAFRA Website: www.ontario.ca/omafra
- Northern Ontario Regional Office (NORO): 1-800-461-6132
- Agricultural Information Contact Centre: 1-877-424-1300 or e-mail ag.info.omafra@ontario.ca
- Nutrient Management Line: 1-866-242-4460 or e-mail nman.omafra@ontario.ca
- Growing Forward Information Line: 1-888-479-3931 or e-mail growingforward@ontario.ca
- The Cropline: 1-888-449-0937
- Environmental Farm Plan: EFP Workshop Dates
- Growing Your Farm Profits: GYFP

Workshop Dates

- Maple Production Information Centre – www.ontario.ca/maple
- Online Info Resource Champions Food Safety: A revamped Food Safety and Traceability website at www.ontario.ca/foodsafety. Visitwww.ontario.ca/haccp for general information about food safety for food processors.
- The Farm Line: 1-888-451-2903 - A confidential emotional support and referral service
- Farm Financial Assessment Advisor: FFAA Roster
- OMAFRA Cost of Production Calculators: COP
- OMAFRA Financial Resources and Support Services for Families Call: 1-800-461-6132 or pick up at NORO, Verner

1.Growing Forward Business Development

Growing Your Farm Profits workshops are set in a relaxed atmosphere where personal and financial details are not required to be shared, the workshop teaches you how to do a self-assessment of your business. Identifying your business strengths and planning needs will allow you to take the next steps: developing an Action Plan and receiving sign-off from your GYFP workshop leader. Each farm business is unique and once you set your goals in your Action Plan and receive sign-off, you can decide what cost-share opportunity is right for you. For more details on the cost-share opportunities visit: http://www.omafra.gov.on.ca/english/about/growingforward/busdev.htm .

If you are interested in a Growing Your Farm Profits workshop, please contact Claire Venne at 705-594-9194 or temiskaming@ontariosoilcrop.org. Workshops will be scheduled based on demand.

Researcher Spotlight:

Graeme Spiers

by Kelly Bird, NEOSCIA Intern

The NEOSCIA summer tour will be taking place in Sudbury district, thus for this issue of Breaking Ground we will be highlighting Dr. Graeme Spiers. He is a professor at Laurentian University (Sudbury), and if you have not already met him, he someone who you will most likely bump into on the tour; he is a hard man to miss.

Dr. Graeme Spiers acquired his Bachelor of Science degree in Earth Sciences and Botany from the University of Waikato in New Zealand. His Master of Science and PhD were obtained at the University of Alberta with a focus on Pedology, Clay Mineralogy and Chemistry. He has worked as a Research Scientist at the University of Guelph and has worked on numerous consulting projects across Western Canada. Dr. Graeme Spiers is associated with research programs at the Universities Waterloo, Alberta, Laurentian, Guelph and New Brunswick. He has had one hundred publications, and thirty of them being journal papers.

He is also the Chair of Environmental Monitoring at Laurentian and is the Director for the Centre for Environmental Monitoring with MIRARCO. His focus at MIRARCO is on the following "1. Remote environmental monitoring technology development, 2.Environmental chemistry and 3. Stressed ecosystem rehabilitation and Aquatic system quality control."

WOMEN IN AGRI-BUSINESS

Symposium, Oct. 13, 2010, Guelph.

Canadian women involved in agricultural businesses, from "farm through to retail", as well as those women involved in agricultural leadership roles within an association/company/agency or on Boards and Committees should plan to attend this one of a kind gathering. The goals are as follows:

1. To invest in leadership and business skills specifically for women in rural, agriculture, and agri-food business sectors.
2. To encourage/foster women in agri-business leadership roles. 3. To provide an opportunity for women to network with others in the industry.

Topics and Speakers

"Women in Business: A political perspective", The Honourable Helena Guergis, Minister of State for the Status of Women and Member of Parliament for Simcoe-Grey

"American Agri-Women", Chris Wilson, President and Marcie Williams, Past President

"Qualities of an Effective Business Leader" Kellie Garrett, Senior VP, Strategy, Knowledge and Reputation, Farm Credit Canada

"Advocacy and Policy Making", Catherine Swift, Canadian Federation of Independent Business

"Time Management – Work: Life Balance" Deb Loyd, Owner, Deb Loyd and Company

"Inter-Generational Similarities can Power Organizations", Carly O'Brien, The Achievement Centre

"How to Mentor the Next Generation of Business Leaders", Jill Malleck, Epiphany at Work

"What Makes a Successful Business?" Jasmin Hofer, Energrow Inc.

OSCIA News...

June 2010

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

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Ontario Soil and Crop Improvement Association
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OSCIA 2011
ANNUAL MEETING

Date: February 8 & 9, 2011
Place: Sheraton Fallsview
Niagara Falls

Message from the President

Barry Hill

I have never been one of those people, whom I envy by the way, who can quote with great detail the exact weather conditions almost to the day for each planting season they have been through. However, I am sure I will remember 2010 for three reasons. Firstly, I decided not to reduce my acreage even though I was involved with OSCIA. Secondly, this was the first year in my cropping career that we had corn planted before the end of April. Thirdly, after the weather turned wet, I did not finish the corn until almost three weeks later. But we still beat the May 24 weekend, which in many years has been our starting date. As the song goes, memories are made of this.

Also memorable have been the meetings that I have attended this winter. In addition to participating on the OPG/OMAFRA steering committee for biomass, and speaking up for working farmers, I have been to a Premier's Summit on Agriculture and an Agriculture and Agri-Food Canada (AAFC) consultation panel on developing the next round of agricultural policy for beyond 2013.

With regard to biomass, you will be hearing about an exciting research and development project shortly. I will leave details for that announcement.

The Premier's Summit, attended at the opening by several cabinet ministers, focussed on meeting the needs of the consumer. Speakers for Campbell's Soup, Ipsos Reid, M&M Meats, Toronto Food Bank and others all talked about changing tastes of the retail consumer. People like to talk innovation, ethnic markets, and specialty foods at these types of meetings. This is all fine, but for those of us who supply raw product to processors or other farmers for feed, we need to transpose these remarks into our own situation. Our consumers are not the public directly. Good cookies rely on good wheat, as an example. We need to concentrate on growing crops of high quality that will be in demand by all cookie monsters. It's a fool's game to expect that

farmers will assume the risk not only for production but the marketing risk for innovative products.

While at the Summit I did meet with Minister Mitchell and outline OSCIA's activities and future plans.

The AAFC meeting began by outlining the current issues in agriculture: trade, environment, sector growth, limits on resources (such as water) and changing societal expectations. This last issue captures new societal attitudes and in some cases new laws that flow from those expectations.

Coping with these issues, according to AAFC, requires innovation in science and business, growth in non-traditional markets and recognizing new social expectations.

The messages back from the farm organizations present were focussed on survival of farmers in the short term and better government programs in the long term. A big concern was the impositions of costs created by government legislation being downloaded onto the farmer. Co-operation with urban neighbours and more market research and development were also mentioned.

One wonders why farmer consultations are held during the spring planting rush. But hey, lets be fair. Is it not really nice to get out of an office in the spring? The trees are budding, the birds singing. The sunrise. The sunset. Really good sandwiches and you don't have to wash your hands! My wife is convinced these are great reasons for being on a farm.♦

OSCIA Annual Meeting

A number of excellent speakers were featured at the 2010 Annual Meeting, whose presentations will be summarized in each issue of OSCIA News in 2010 by members of the OSCIA Regional Communication Coordinator team. Following are the next two articles.

"MANAGING NUTRIENT DOLLARS" - Dr. Tom Bruulsema

as summarized by Jeff Burke, RCC, North Western Ontario

Dr. Tom Bruulsema delivered one of the opening presentations to a crowd of producers at the 2010 OSCIA annual meeting. Dr. Bruulsema is involved with the International Plant Nutrition Institute. The presentation *Managing Nutrient Dollars* examined fertilizer use and management locally, nationally, and internationally.

Although farmers are becoming better fertilizer managers, the global consumption of fertilizer is continuing to increase due to an increased demand for food. The estimated global phosphorous and potash reserves, extractable at today's prices, are 96 and 240 years respectively, although there is about three times that amount which will cost more to extract. When fertilizer and crop prices are fluctuating drastically, it is important to not only look at the cost of fertilizer, but to examine the ratio between the price of the crop and that of the fertilizer to determine the actual value of the fertilizer.

In Ontario, farmers are applying sufficient amounts of Nitrogen, but historically have over-applied phosphorous. Around 1990 Ontario farmers began decreasing phosphate rates and may now be applying a deficit. Similarly, Ontario farmers may also be applying a deficit of potash. About 28% of the farmland in Ontario measures less than 20ppm P, and 40% measures less than 120ppm K.

It is important to remember the four 'R's of nutrient stewardship, right place, right source, right rate, and right time. Along with these, farmers should consider the economical, environmental, and social impacts of their nutrient management plan.

Although the results may vary, a 'rule of thumb' is for every 25lbs/ac of P_20_5 removed, the soil P level is reduced by 1ppm. Similarly, for every 8lbs/ac of K_20 removed, the soil K level is reduced by 1ppm. Yield will begin to decline if the P level drops below 20ppm and the K level drop below 120ppm.

It is important to exercise caution when looking at some of the new enhanced efficiency products that are available on the market. Be sure to ask what is the mode of action, what is the product's performance, does the product enhance the farmers ability to grow good crops, and are there opportunities for innovation?

For more information on Dr. Bruulsema's work, visit www.nane.ipni.net.♦

"THE VALUE OF FORAGES" - James Parsons

as summarized by Tracy Myers, RCC, Eastern Valley Region

Producing high quality forages has consistently been the goal and end product of the 2009 Ontario Forage Master, James Parsons. James, along with his wife Michelle and three children own and operate Parview Farms Inc. which is located in Cache Bay, Nipissing District (between North Bay and Sudbury). A graduate of the University of Guelph (majoring in finance) James is also a hockey coach and avid hockey player.

The focus of seeking out the best management practices that fit nicely into the farm is centred around the three areas of capital efficiency, labour efficiency, and energy efficiency. Barley, oats, spring and winter wheat have been the most successful crops grown by the Parsons family. Milking 55 Holstein cows, producing 80 kg per day, James attributes his success to the maximum use of nutrient value produced by his forages.

First cut hay takes place between June 5th to 10th and is cut at the mid-bud stage. Weather permitting thirty acres per day is cut. To maximize the sugar content late afternoon cutting is a must. Baling takes place when the hay has a moisture content of 55 percent. The end results are 4 x 4 foot round bales weighing approximately 450 kg (1000 lbs).

OSCIA 2nd Vice President, Joan McKinlay, thanks the 2009 Ontario Forage Master, James Parsons, for sharing his tips on growing excellent forages.
- photo submitted by Tracy Myers

Three weeks after bale wrapping, hay samples are taken and sent for analysis. 4 x 5 foot dry bales are also made for the heifers and dry cows.

Second cut is done around July 10th. Total hay production includes 1500 bales of haylage for the milking cows, 400 bales for the heifers and 300 dry bales for the dry cows. Successful crop rotation involves a rotational cycle of 4 years hay, 1 year canola, 1 year cereal and alfalfa/timothy with a barley cover. Forage establishment consists of the following: alfalfa/timothy mix @ 15 lbs/ac, barley cover crop @ 90 lbs/ac, mix 85% alfalfa, 15% timothy.

The end results are a high quality forage that his dairy herd thrives on. Extra-late maturing Orchard grass is a new innovation for James for the spring of 2010. He is hopeful that the results will show greater digestibility and energy in the livestock feed.

The feeding regime for the dairy herd begins in the afternoon at 4 p.m. Cows are privy to a buffet-style feeding of four round bales while the grain and supplement are fed with computer feeders. No corn silage is fed. 3" to 4" cuts of hay have proven to be of maximum benefit to the cows. How does James measure the performance of his forage regime? In the last five years the herd has had the highest DHI score in Northern Ontario and has ranked in the top thirty within the province.

The Parsons farm is a very labour and energy efficient operation with equipment being used for a variety of tasks. Adaptability to different systems is also a focus of the farm. James and his family have developed a mission statement that encompasses his winning methods:- "Our business is about profitably producing a high quality, nutritious product in an environment that recognizes family, employee pride, animal husbandry, land stewardship, and community involvement." We wish

OSCIA Supplies

There are a number of supplies available through the provincial office by having the secretary of your local or regional association place an order.

Among the items available are:

Tru-Chek rain gauges	$10
OSCIA ball caps	$11
OSCIA vests	$46
OSCIA farm gate signs	$10
OSCIA lapel pins	n/c
Soil & Water Conservation Farm Award Signs	n/c
Recognition Certificates	n/c

Simply get in touch with Evelyn Howse at Evelyn.Howse@ontariosoilcrop.org or by phone at 1-800-265-9751, ext 63152.♦

Biomass Information Sessions

OSCIA is leading information sessions for farmers interested in becoming cooperators to assist researchers in field-scale studies involving growing agricultural biomass.

If you are interested in possible opportunities for adding a purpose-grown biomass crop to your fields, please come out to an information session:

June 3, 7pm: Auditorium, Simcoe Research Station - 1283 Blueline Rd, Simcoe
June 7, 7pm: Pioneer Theatre, Ridgetown College, 120 Main St. E., Ridgetown
June 10, 7pm: Altadore Room, Altadore Quality Inn Hotel & Suites - 580 Bruin Blvd, Woodstock

For inquiries, contact:

Nick Betts
Outreach Coordinator, OSCIA
Tel: 519-826-4219
Email: nick.betts@ontariosoilcrop.org
Tw: @nickAToscia ♦

www.ontariosoilcrop.org

2010 Ontario Forage Masters

The 2010 Ontario Forage Masters program is well under way, with over 170 participants from 21 local associations entered.

Those include Brant, Carleton, Dundas, Frontenac, Glengarry, Grey, Halton, Lanark, Leeds, Nipissing West/ Parry Sound, Northumberland, Oxford, Peel, Peterborough, Prescott, Renfrew, Russell, Simcoe North, Stormont, Thunder Bay, and Victoria.

Prizes for the top three winners in each county include 25 kg of Pickseed seed, $150 and $50 Pickseed gift certificates, and $75 gift certficate from Agri-Food Laboratories.

Each county/district is entitled to enter their first-place winner in the provincial competition in the fall. That person will submit a written submission to the provincial office. All submissions will be judged, and a maximum of six entrants invited to present in person to the judging panel in Guelph, followed by a trip to the horse show at the Royal Agricultural Winter Fair and an overnight stay at a hotel in Toronto.

The person chosen as the 2010 Ontario Forage Master will be requested to give their presentation at the Forage Spokesperson Competition in the United States in 2011.

We'd like to take this opportunity to thank the generous sponsors of this program, now in its 23rd consecutive year:

Seed Bytes

– Harold Rudy, Provincial Office

Some may not be aware that the OSCIA provincial office provides administrative support (fee for service) to the Ontario Seed Growers' Association (OSGA). OSGA is a branch of the Canadian Seed Growers' Association (head office in Ottawa). OSCIA's affiliation with OSGA goes back to OSCIA's origin in 1939. In fact, in reviewing numerous archived information about the local and provincial activities, introduction and comparison of new seed varieties (including potatoes) encompassed much of the agenda at local field days.

There is a wealth of information on the seed industry that comes through this office. Seed growers in Ontario (there were 1011 Certified Ontario seed growers in 2009), seed establishments, seed trade marketers, seed analysts, seed brokers, plant breeders, seed distributors and suppliers to the industry are kept informed through several publications: 'Seed Scoop', 'Seed to Success', and 'Germination', to name a few.

In future editions of 'OSCIA News', I plan to dedicate a short paragraph or two to highlight a new development or unusual event impacting the seed industry that may not be reported in the general agricultural media. This space will not do justice to the depth of the topic but I will provide a website or two that references the topic for further details.

The first tidbit of seed news relates to the European policy on zero tolerance for genetically modified imports of grains and oilseeds. Zero tolerance is unrealistic for most commercial shipments and that policy is affecting the supply availability for European feed and processing industries. Once bitten, twice shy, exporting countries such as Brazil, Argentina, US and Canada (remember the Triffid Flax fiasco) are diverting their export interests to expanding markets in China, SE Asia and elsewhere, more confident with realistic tolerances of 1%, for example, in Japan. A European study conducted by Fefac/Conceral (feed industry and agricultural trade organization) suggests that 20% of the feed and livestock industry costs are a result of the zero tolerance policy. Pressure is mounting to relax the tolerances to more realistic levels to encourage a more plentiful supply of imports.

http://www.europeanvoice.com/article/imported/eu-under-pressure-to-speed-up-gm-crop-authorisations/62859.aspx

http://www.producer.com/News/Article.aspx?aid=22276

New GYFP Field Staff

OSCIA is pleased to announce the addition of two new members to our team. Kate Procter will be the Workshop Leader and Program Representative for GYFP in Perth County and Charles McLean the GYFP Workshop Leader in Essex County.

Kate Procter has a Bachelor of Science in Agriculture from the University of Guelph, where she majored in Resource Management. She was raised on a farm in Huron County where she currently works with her father managing a swine breeding stock and crop operation. Kate has also worked as a freelance writer and photographer for thirteen years. Her work has been published across Canada, in the United States, New Zealand and Finland.

Charles McLean graduated from the University of Windsor with an Honours Bachelor of Commerce degree in Accounting. Charles worked for over 30 years in senior financial and administrative positions in municipal and publicly-accountable organizations, retiring in 2007. He was raised on a dairy farm in Essex County and continues to be involved in agriculture, operating a grains and oilseeds farm.

Welcome to the team Kate and Charles! ♦

Crop Advances - Now on the Website!!

http://www.ontariosoilcrop.org/cropadvances.htm



CROP TALK

OMAFRA Field Crop Specialists – Your Crop Info Source

Ontario Ministry of Agriculture, Food & 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

Additional Information from OMAFRA

Cropline 1-888-449-0937

En françcais!

L'inforation du Ministère de l'agriculture it di lalimentation de l'Ontario est disponible sur le site web du MAAARO en françcais au www.omafra.gov.on.ca

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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, Canola & Edible Beans Specialist
Peter Johnson, Cereals Specialist
Scott Banks, Emerging Crops Specialist
Gilles Quesnel, Field Crops, IPM Program Lead
Christine Brown, Nutrient Management Program Lead
Adam Hayes, Soil Management Specialist - Field Crops
Greg Stewart, Corn Industry Program Lead
Tracey Baute, Field Crop Entomology
Editor: Joel Bagg, Forage Specialist
Compiled by: Maggie Winn, OMAFRA, Lindsay

More Profit From Oats Using A Fungicide

by Scott Banks, Emerging Crops Specialist, OMAFRA

Oat leaf diseases, such as crown rust, can be very devastating to both yield and quality. The higher priced milling oat and horse oat markets require clean, high test weight oats. Farmers need a premium price as well as a descent yield in order to make a profit. If you are growing oats in southern Ontario, they need to be sprayed with a fungicide at the "flag-leaf emerged" stage of the oats to manage leaf disease. In northern Ontario, leaf diseases are less frequently an issue. Farmers should scout their fields as the oats approach the flag leaf emergence stage, monitor the progression of the disease and be prepared to apply a fungicide if conditions are favourable for leaf disease development.

Breakdown In Oat Variety Rust Tolerance

European buckthorn is the alternate host to oat leaf rust. Buckthorn is common in central and eastern Ontario, and over the years has proven almost impossible to control. In the past, oat variety breeders bred in genetic tolerance to rust. The use of rust resistant varieties was an effective tool in managing the disease. However, there are different races of the fungus and they change over time. As a result, the rust organism evolves to overcome the genetic tolerance in the previously resistant varieties and these varieties become susceptible. When there is no genetic tolerance, the plant can no longer fight the new rust organism. This genetic tolerance breakdown was particularly evident in fields that were not sprayed with a fungicide in 2008 and 2009 where rust significantly reduced the oat yields and quality.

Fungicide Application Benefits

A fungicide should be applied at flag-leaf emerged stage (Zadock 39). This stage is when the last leaf emerges from the stem before the head emerges (Figure 1). The application of fungicide at this stage can significantly improve both oat grain yield and quality (test weight and kernel colour), and reduce the risk of lodging (Figure 2). In a 2008 fungicide trial in eastern Ontario, there was a 20% yield increase with the use of a fungicide at the flag-leaf stage on a variety where the genetic rust tolerance has broken down.

Figure 1 – Flag Leaf Emerged Cereal Stage

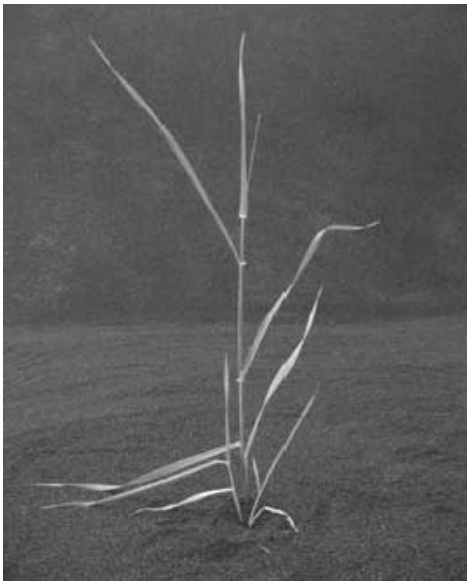

Figure 2 - 2008 Fungicide Trial on Oats – Note lodging in unsprayed strips

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More Profit From Oats Using A Fungicide

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Fungicide Products

There are several fungicide products available for control of leaf diseases in oats. Tilt 250E, Bumper 418 EC, Stratego 250 EC, and Headline EC can be used for crown (leaf) rust. For other diseases such as leaf blotch, Quilt can also be applied. The retail price of the fungicides ranges between $9 to $14 per acre plus application costs.

For more information about foliar disease control management strategies and available fungicide products refer to OMAFRA Publication 811, Agronomy Guide (p. 252) (www.omafra.gov.on.ca/english/crops/pub811/14cereal.htm) and Publication 812, Field Crop Protection Guide (p. 50-52) (www.omafra.gov.on.ca/ english/crops/pub812/4ocrust.htm).

WHY BIOMASS?

A summary of ideas presented by OMAFRA's Dr. Ian McDonald as presented at the 2010 NEOSCIA Earlton Farm Show (compiled by G.J.Gambles, RCC)

The move to investigate Agricultural Biomass as an alternate "energy feedstock" is a direct result of a request from the Ontario Power Authority that is seeking to replace coal as an electrical energy source. Farmers might consider supplying off-spec grains, poor quality hay and forages, crop residue such as corn cobs, and straw as well as agri-forestry byproducts.

The biomass energy business must be a high volumn, low cost initiative. To cover replacement fertilizer value and harvest costs, the producer must receive $53 - $73 per ton in 2010. Therefore the best opportunity is to plant dedicated grass species such as switchgrass, miscanthus, and big bluestem. But are they winterhardy in your area? Research facilities in New Liskeard and Emo are trying to determine their management limitations right now.

Farmers must always remember to leave at least 30% ground cover on the soil to control erosion and replace lost organic matter. In real life, all crops are equal for energy production. The primary question is "How much biomass can you remove to achieve both a positive cash flow and maintain sustainable farmland?"

Scouting For Potato Leafhopper In Alfalfa

by Gilles Quesnel, Field Crop Integrated Pest Management Specialist, OMAFRA

Potato Leafhopper (PLH) is one of the most damaging alfalfa insect pests in Ontario. While PLH is seldom a problem on the first cutting of established alfalfa, the insect can start damaging new seedings by mid-June. The damage done by PLH is not as dramatic as that of an alfalfa weevil outbreak, but is more chronic and widespread. The injury often goes undetected and affected plants do not recover until the stems have been harvested. New seedings are particularly susceptible to PLH damage.

What To Watch For

Leafhoppers usually arrive in Ontario in late-May. Adults are 3 mm (1/8 inch) long, lime green and wedge-shaped. The juvenile leafhoppers or nymphs are about 0.8 mm (1/32 inch) long when they hatch. They resemble adults, but they are wingless and are often found on the underside of the leaves. Both the adults and nymphs feed on alfalfa. They insert their mouthparts into a leaf midrib and suck sap juices from the plant. PLH inject saliva containing a toxin into the plants as they feed. This distorts and blocks the tiny tubes that distribute nutrients within the plant. The result is the characteristic V-shape "hopperburn", which starts as a wedge-shaped yellowish pattern on the leaf tips. The alfalfa will be stunted and may also turn reddish. Most of the damage occurs from June to mid-August. High-risk factors include hot, dry seasons. Symptoms are sometimes confused with nutrient (boron) deficiency or herbicide injury. More commonly, symptoms are often dismissed as "drought damage."

Scout Before Damage Occurs Economic losses occur before plant symptoms develop, so it is important to identify the presence of large leafhopper populations before the damage occurs. If leaf yellowing has already occurred, it is too late to prevent damage to that cutting. Scouting with a sweep net will help you determine whether early harvest or spraying is needed. In new spring seedings, start scouting fields when the plants are 10 to 15 cm (4 - 6 inches) high. Scout at intervals of 5 to 7 days. In established stands begin scouting after first-cut when plant regrowth is 5 to 10 cm (2 to 4 inches) high.

To determine the number of leafhoppers present, including adults and nymphs, take 10 sweeps and divide by 10. Do this in 5 representative areas of the field and note the height of the alfalfa. Recommended action thresholds are as follows:

Recommended Action Thresholds	
Stem Height per Sweep[1]	Average Leafhoppers
9 cm (3.5 in.)	0.2 adults
15 cm (6 in.)	0.5 adults
25 cm (10 in.)	1.0 adults or nymph
36 cm (14 in.)	2.0 adults or nymph

[1] 1 sweep = 180° (half circle) sweep with the net.

Management Strategies

- Alfalfa varieties are available that are resistant to PLH. These varieties have glandular hairs, both on the leaves and stems, that act as mechanical barriers to PLH feeding. Varieties rated Highly Resistant (HR) to PLH include FSG400LH, TrailBlazer 4.0, WL345LH, and Pioneer 53H92 (www.goforages.ca).
- The glandular hairs are not fully expressed the first year, so treat new seedings of PLH-resistant varieties the same as regular alfalfa.
- When considering whether to use a PLH-resistant variety, include the level of PLH infestation expected in a typical year. PLH is typically more of a problem in the Lake Erie counties and Niagara area. Also consider the cost of scouting, insecticide and spraying, and the cost and performance traits of the PLH resistant variety, such as yield and disease resistance.
- Cutting alfalfa early will potentially reduce egg, nymph and adult populations. A naturally occurring fungal pathogen helps reduce the populations of the PLH under cool, moist conditions.

Refer to OMAFRA Publication 812, "Field Crop Protection Guide" and product labels for insecticide information.

Studying the Impact of Harvesting Crop Residues

by Bill Deen, Cropping Systems, Dept. of Plant Ag., University of Guelph, & Ian McDonald, Applied Research Coordinator-Field Crops, OMAFRA

There is increased focus on the harvest of crop residues to address the increasing demand for biomass based feedstock to meet both traditional and non-traditional uses. To put this in perspective, we average about 1.8, 2.4 and 1.4 million acres of corn, soybeans and cereals in Ontario. Our experience in residue removal is limited primarily to cereal straw. Peter Johnson, Cereals Specialist, OMAFRA, estimates that we harvest about 60% of the cereal acres for straw each year. With the exception of some very small pockets in livestock country, we have zero experience with harvesting corn or soybean residue. This spring there was a lot more corn stover harvest spurred on by straw costs of 6-8 ¢/lb.

Interest In Crop Residues

There is an increasing interest in crop residues for use in:

- second generation ethanol (especially in the US),
- combustion fuel for electrical and heat production (coal replacement), and
- feedstock for emerging bioproduct opportunities.

This has caught a lot of groups off-guard with respect to the impact of harvesting this biomass will have on soil productivity and sustainability. With little interest in residue harvest in the past, very little research was conducted, mostly of short term duration (3 years). Soil organic matter levels change gradually in response to management. Negative effects of residue removal may not be immediately detected, but may manifest themselves gradually over time.

Impacts of Residue Removal

A recent review paper of scientific literature by Dr Humberto Blanco-Canqui of Kansas State University, explored all the research available on residue removal. He points out that excessive crop residue removal impacts crop productivity and long term sustainability by affecting soil properties, soil organic carbon dynamics, and water and wind erosion potential. Soil physical, chemical and biological properties are impacted and influence susceptibility to compaction, crusting, surface sealing, temperature and moisture modulation and retention, soil aggregation, macroporosity, aeration, nutrient cycling and availability, and biological activity. These impacts were measured across a range of soils and residue removal levels. The conclusions vary widely as to how much crop residue can be removed before negative effects are observed. Optimum removal rates vary with geography, climate, soil type, crop rotation, tillage systems, and frequency of removal. Blanco-Canqui concludes that existing data suggests that only a small fraction of crop residues can be sustainably removed, and that these small amounts may not be economically feasible to harvest.

Research On New Production Systems

There is conflicting opinions across academics, extension personnel, producers and others on the benefits and risks of harvesting crop residues. Numerous research studies have been initiated across North America. These include investigating the biology, environmental, economic, and logistical aspects of crop residue harvest. Researchers are also trying to develop new production systems that would offset potential negative effects of crop residue removal. These include extended rotations that include perennial forages, cover crops, additional organic amendments and other strategies.

University of Guelph

In Ontario, a University of Guelph project is investigating the science and practicality of crop residue removal under our conditions of climate, soil, production systems and economics. The goal is to identify changes to present production systems that may enhance the sustainability and volumes of crop residues that could be harvested without reducing long term productivity of our soils.

Is Organic Still Growing?

by Hugh Martin, Organic Crop Production Program Lead, OMAFRA

What is the future and growth of organics? Twenty years ago people assumed that organic was just a fad and in a few months the consumer's interest in organic food would pass. At that time North American organic food sales were just over $1-2 billion per year. In 2009, retail sales of organic food were approximately $25 billion in the United States and $2 billion in Canada.

Growth In Organic Food Sales

Organic sales grew at 17 - 22% per year from the early1990's to 2007. When the economic recession hit in late2008, organic sales reduced in growth, but most sectors continued a lower level of steady growth. Fresh fruit and vegetables and fresh meats maintained the best growth, while processed foods grew the least. Overall growth in the US organic sector was over 5% in 2009.

Market Share

Organic foods have become a small but significant part of the mainstream marketplace. In the United States, 3.7% of all foods being sold are organic. In Canada, the market share is lower but considered to be over 2%. Up to 80% of our organic foods are imported compared to approximately 30% for all foods, due to limited organic farm production and food processing capacity. Organic farm production levels vary by commodity, but approximately 1.4% of our total farm production is organic. About 25% of the Ontario farm gate value of organic is fresh fruits and vegetables, 30% is grain and forage crops (for processed foods and livestock feeds), and 45% is livestock production (dairy, eggs, pork, beef, etc).

Consumer Demand

Organic food sales weathered the economic storm of 2008-9 reasonably well. From early indications, it appears that growth will improve in 2010. Consumers have proven that they want the choice of

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What Makes A Successful Grazing Program?

by Jack Kyle, Grazing Specialist, OMAFRA

Promoting good grass growth is the most important part of a successful grazing program. Improved grass growth is critical to get the most livestock production from the pasture. If you manage the grass on your farm to get maximum growth and then optimize the harvest of this growth, you will achieve significant results. Productive pastures can produce 500 to 600 pounds of gain per acre.

With any annual crop we take great steps to get optimum growth and plant development. We select varieties, fertilize to crop needs and control pests. Harvest does not happen until the crop has reached the ideal harvest stage.

Let's think about these same things, but from a grazing or pasture perspective.

Species

How species are managed is as important as what species are present in the pasture. Species differ somewhat in their growth habits, but all species can provide both good quality and quantity of forage. Manage your pastures to the advantage of the species present. Grasses should initially be grazed when the third-leaf is fully emerged. This will be an earlier calendar date for orchard grass than brome grasses. Clovers and alfalfa will break winter dormancy early and be ready to graze shortly after the grasses. Trefoil is late to break winter dormancy and consequently is not going to provide pasture until late in the spring.

Fertility

Fertility is important for good plant growth. Grasses will respond to nitrogen applications in late spring. Livestock manure produced by the grazing animals assists in providing fertility. If evenly distributed across the pastures, this manure will enhance the forage growth.

Optimum Stage At Grazing

The optimum harvest time for pasture grasses is after the third-leaf has emerged and before the seed head has emerged. Harvesting at this time allows for the plant to accumulate significant livestock feed and replenish root growth and reserves. Once the grass has been grazed, then it is time to let it regrow until it has reached the third-leaf stage again. This re-growth will take about 25 to 40 days or more, depending on the season. The regrowth will be faster in the spring with the cooler temperatures and adequate moisture, and will be slower during the hot, drier summer.

Fence

A rotational grazing system allows you to manage the grass for optimum forage production. Consequently there will be significantly more forage for your livestock. When livestock are being moved to fresh forage on a regular 1-5 day basis, a single or double strand electric fence will be adequate to control your cattle. Fencing allows you to control your livestock and prevent the re-grazing that limits forage production. A well managed grazing system will provide productive pastures on your farm.

Is Organic Still Growing?

Continued from page 12

buying some organic products. About 5% of consumers are core organic consumers that chose to buy a significant amount of organic products. About 55% of consumers buy a few organic products that may be favourite products or may just be a new product on the shelf that catches their eye. Both groups continue to buy more when high quality organic products are available. Organic consumers also want to buy local organic products that are grown in Ontario.

Organic Production Opportunities

I have always said that organic production is not for everyone. Organic production systems require a high level of management that is information intensive, especially during transition period when learning the new production system. Do not underestimate the differences in the production systems. Marketing requires more effort and labour needs can increase. The transition to organic takes time and effort to learn a new production system, but is an investment in your future business.

When I visit organic farms and businesses in Ontario, I see good managers that are very successful and glad they made the change. I also see some managers who have not yet been able to put all the pieces together and their business is suffering. If you want to get into organic, take time to do your research and develop a good business plan on how to get there. Talk to other organic farmers who are successful and join some of the associations or attend their meetings and summer tours.

For more information refer to:

OMAFRA organic information - www.ontario.ca/organic Ecological Farmers Association of Ontario – www.efao.ca Canadian Organic Growers – www.cog.ca Organic Council of Ontario – www.organiccouncil.ca.

NEOSCIA Biomass Conference

Five top-notch speakers were featured on a "panel of experts" at this April 2010 Earlton Farm Show event. The talk started with Greg Zimmerman from the Soo (Michigan side). He has significant experience with pelletizing and burning Reed Canary Grass (RCG) as an energy source. It has an energy content of about 8000 BTU/# with production averaging 1T/ac. Note that 3ac.of RCG, has an equivalent energy to 800 gal. of propane.

Grass is easy to grow, harvest, and pelletize, but it is not a mature industry compared to wood pelletizing. There is still a question of energy efficiency and payback, depending on the going price of commercial fuels.

Harvest the material in late fall (November). Grind it in a hammer mill operated by tractor PTO at 750 RPM. Be

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Fact Sheet

Where does HST apply and how?

1. Items that will not change.

- Farm machinery (except tractors under 60 hp)
- Seed in farm size lots
- Fertilizer in farm size lots
- Livestock (except pets)
- Fencing
- All items that are currently GST free for farms at point of purchase

These items have been and will continue to be RST free and GST free.

2. Items currently RST exempt at point of purchase but will be subject to HST. HST can be recovered by input tax credit.

a) Major Items

- Tractors under 60 hp
- ATV with hitch or rack over 200 cc
- Boats/motors for fish farms
- Custom farming services
- Land rental – except share cropping
- Truck rental
- Road clearing, maintenance
- Artificial insemination
- Grain storage in an elevator/bin
- Fruit and veg. storage
- Heating oil, natural gas, propane, electricity
- Generators
- New farm buildings
- Building materials
- Machinery rental (unless the machinery would be HST free if bought)
- Purchases of land – deducting value of used buildings from land purchases for HST payment may become a matter of serious contention

b) Minor Items

- Power tools and hand tools
- Ladders, wheel barrows
- Animal weight record forms
- Manger nets
- Fluids for equipment including - oil, antifreeze, grease, hydraulic fluid

The above items are now RST free, but farmers will have to pay HST. Provided they file for HST (same process as for GST now) they will have the tax rebated.

3. Items where farmers must charge HST as a vendor.

- Beeswax
- Maple syrup candy
- Canary seed, grass seed, flowers, bedding plants, live trees, firewood,
- Livestock as pets – horses, mules, rabbits (except where clearly for food)
- Hay in lots under 1,650 lbs. (more than one large round bale or equivalent)
- Electricity from generators connected to the grid

For all of these items if a farmer is selling them, he must collect and remit HST. The customer if they are a business and are re-selling the material can file for HST and get the tax rebated. If they are a final consumer, they cannot claim a rebate.



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En françcais!

L'inforation du Ministère de l'agriculture it di lalimentation de l'Ontario est disponible sur le site web du MAAARO en françcais au www.omafra.gov.on.ca

Avantages de l'épandage de fumier en été

Auteur : Christine Brown, chargée de programme, gestion des éléments nutritifs des grandes cultures/MAAARO

Date de création : 16 juin 2010

Dernière révision : 16 juin 2010

Une culture de blé qui doit être moissonnée tôt peut décider certains producteurs à épandre du fumier, du compost, ou des matières premières non agricoles (MPNA).

Avant d'aller au champ, pensez à prélever d'abord un échantillon de ces matières et à en examiner la composition. Quels en sont les avantages? Y a-t-il des risques? Comment peut-on les minimiser?

Avantages

La matière organique et les éléments nutritifs sont bénéfiques pour le sol.

On réduit les besoins en engrais commerciaux.

On alimente les insectes bénéfiques qui améliorent la santé du sol.

Il existe moins de risques de compactage.

Il y a plus de temps disponible (comparé au printemps et à l'automne) pour aller traiter les champs plus éloignés de l'entreposage.

Il est possible de semer une culture de couverture pour optimiser la santé du sol.

Risques relatifs du fumier solide et du fumier liquide

Il y a toujours quelques risques. L'été est le meilleur moment pour l'épandage des fumiers solides, surtout ceux qui comprennent de la litière. Les conditions météorologiques d'été et d'automne favorisent les organismes du sol qui minéralisent l'azote organique qui forme la plus grande portion du fumier solide, afin de rendre les éléments nutritifs plus disponibles pour la culture le printemps suivant. Les risques associés au fumier solide, au compost ou aux MPNA sont plus faibles que ceux liés aux lisiers épandus à ce temps-ci de l'année. Le fumier solide de volaille à frire se situe quelque part entre les lisiers et les fumiers solides du point de vue des taux de conversion de l'azote.

Précautions à prendre avec le lisier ou les MPNA

Lors d'un épisode orageux soudain, le lisier présente un risque plus élevé de ruissellement et d'écoulement dans le réseau de drainage, surtout dans les systèmes sans travail du sol. Le lisier qui pénètre dans les drains peut atteindre les rivières ou les ruisseaux, où l'ammoniac peut tuer les poissons. Le ruissellement qui contient du phosphore est aussi nuisible pour les sources d'eau. Le travail du sol au préalable ou l'injection, si les galeries creusées par les vers de terre ou laissées par d'anciennes racines sont dérangées, augmentent le risque d'infiltration des liquides et des éléments nutritifs, réduisent les odeurs, et le lisier peut se mélanger aux semences des cultures de couverture.

Le lisier a une teneur plus élevée en azote ammoniacal. Avec l'épandage de lisiers en surface sur des sols secs les journées les plus chaudes de l'été, 75 % de la portion ammoniacale peut se volatiliser dans l'air. On aura des plaintes concernant les odeurs près des zones résidentielles. L'incorporation peut aider, mais l'épandage des lisiers liquides de porc ou de volaille est moins nuisible plus tard en saison, quand les températures du sol et de l'air sont plus près de 10 °C.

Le lisier présente une teneur plus élevée en azote ammoniacal qui se convertit vite en azote nitrique avec les conditions estivales.

L'azote nitrique peut se déplacer avec l'eau. Si l'automne est pluvieux aucune culture ne peut retenir l'azote nitrique, qui passe sous la zone racinaire et atteint potentiellement les réseaux de drainage ou les eaux souterraines. Quoi qu'il en soit, cet azote ne sera plus disponible pour la culture l'année suivante.

Combinaison avec une culture de couverture

Pour les lisiers qui sont épandus l'été, l'ajout de cultures de couverture peut empêcher l'azote nitrique de se déplacer sous la zone racinaire et maintenir les éléments nutritifs sous forme « verte ». Dans certains cas, comme avec l'avoine en culture de couverture, le rendement peut être suffisant pour que la culture soit moissonnée comme fourrage. L'azote contenu dans la plupart des cultures de couverture, à l'exception du trèfle rouge, n'est d'ordinaire pas pris en compte dans les besoins de la culture de maïs suivante. Il nourrit les microorganismes du sol, aide à décomposer les résidus et améliore la santé du sol.

Conclusion

Quand on épand du fumier aux champs de blé récoltés tôt, il faut prélever des échantillons des fumiers et des sols, tenir compte des apports en éléments nutritifs additionnels quand on planifie les apports en engrais commerciaux et aussi être attentif aux prévisions météorologiques.

Pour plus de renseignements :

Sans frais : 1 877 424-1300

Local : 519 826-4047

Courriel : ag.info.omafra@ontario.ca

Le cultivar de soya est-il important dans les décisions d'application de fongicides?

Auteur : Horst Bohner, spécialiste de la culture de soya/MAAARO

Date de création : **16 juin 2010**

Dernière révision : **16 juin 2010**

L'application de fongicide foliaire a montré à l'occasion des rendements de soya accrus avec une moyenne en Ontario de 2,2 boisseaux/acre. Cependant, seulement environ 30 % des décisions de pulvérisations ont donné un résultat économiquement bénéfique pour le producteur. Jusqu'ici, aucune corrélation claire à la pression des maladies, à la pratique de travail du sol, au cultivar ou à la température n'a été démontrée par rapport au niveau de rendement obtenu grâce à l'application de fongicide. De récentes recherches dans le maïs indiquent que l'effet sur le rendement pourrait partiellement venir de l'hybride. Si certains cultivars de soya réagissent mieux que d'autres, cette information est importante pour la prise de décisions de gestion.

Un projet sous la direction de Chris Gillard de l'Université de Guelph étudie l'incidence de 20 cultivars de soya aux fongicides foliaires Headline. Les cultivars ont été soigneusement choisis selon différentes ascendances et une gamme de résistances observées aux maladies. Des essais en terre ont été effectués en deux endroits et répliqués quatre fois en 2009. Plus de parcelles d'essais seront établies en 2010 et en 2011. Les essais avaient lieu près d'Exeter et de Chatham. Parmi les paramètres liés à la qualité des semences qui sont étudiés notons l'huile, les protéines, le calibre des grains et la germination pour déterminer quel est l'impact du fongicide sur la qualité de la semence (sur une échelle de 1-5).

Des échantillons de sol ont été prélevés au moment de la mise en terre. Les parcelles d'essai ont aussi été analysées en relation avec la pression des maladies et des insectes.

Exeter

On a noté une hausse globale moyenne du rendement de 1,6 boisseau/acre mais aucune différence dans la réaction des cultivars. Il y avait une différence notable du poids des semences dans les parcelles traitées avec Headline, de l'ordre de 0,8 grammes/100 graines. Aucune différence dans la précocité de maturation n'a été détectée. La qualité visuelle des graines était légèrement meilleure dans les plants non pulvérisés que ceux traités avec Headline.

Chatham

Aucune différence notable de rendement ni effet sur les cultivars n'a été détectée entre les parcelles traitées et non traitées. On a noté deux jours de délai dans la maturation des plants pulvérisés avec Headline. La qualité des semences était légèrement meilleure dans les plants non pulvérisés. Le poids des graines était bien meilleur dans les parcelles traitées avec Headline, de 1,0 gramme/100 graines.

C'était la première de trois années pour cette étude, continuez de nous lire pour les résultats finaux l'an prochain.

Tableau 1. Résultats des essais 2009 - Réaction sur le rendement des cultivars du traitement par fongicide foliaire, année 1

Cultivar		Exeter		Chatham	
		Non traité (boisseaux/acre)	Headline (boisseaux/acre)	Non traité (boisseaux/acre)	Headlinem (boisseaux/acre)
1	Secan #1 AM0908A5-DOYN	71,9	74,6	66,4	65,8
2	Secan #2 AM0808B3-DOYN	68,8	71,2	69,1	71,9
3	Secan RCAT MatRix	68,9	70,7	55,9	54,7
4	Secan RCAT MiRRa	66,6	67,9	58,8	60,0
5	Syngenta S14-A7	69,5	69,8	53,4	57,9
6	Syngenta S14-K6	65,9	70,7	59,6	60,8
7	Syngenta S17-A1	70,4	71,0	61,2	61,5
8	Syngenta S21-N6	70,1	71,8	65,2	71,0
9	Monsanto 8-60RY	71,4	71,4	70,0	70,0
10	Monsanto 28-61RY	71,9	75,6	71,5	66,0
11	Monsanto 29-60RY	73,8	76,2	71,7	71,8
12	Monsanto 31-10RY	77,0	75,0	77,3	75,9
13	Hyland RR Respond	69,8	68,3	68,5	70,0
14	Hyland RR Rodney	65,4	70,8	59,6	62,1
15	Hyland HR 12R42	68,1	72,2	57,9	62,6
16	Hyland HS 11R46	71,7	72,8	63,6	59,4
17	Pioneer 91M01	71,4	70,1	59,3	60,5
18	Pioneer 91M41	67,9	70,0	60,9	62,7
19	Pioneer 91Y90	70,7	70,2	67,2	68,3
20	Pioneer 92Y30	70,5	73,1	64,4	66,7

Faucher le foin le matin ou l'après-midi?

Auteur : Joel Bagg, spécialiste de la culture des fourrages/MAAARO

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Peut-on améliorer la teneur en sucres et la qualité des éléments nutritifs du foin en fauchant l'après-midi plutôt que le matin? Beaucoup de renseignements sont contradictoires à ce sujet, créant de la confusion et de la controverse.

En faveur de la fauche l'après-midi - la photosynthèse

Pendant la journée, les cultures fourragères convertissent la lumière du soleil en sucre par photosynthèse. Les sucres et l'amidon sont produits plus vite qu'ils ne peuvent être transférés aux réserves des racines et de la couronne, aussi à la fin d'un jour ensoleillé, la teneur en sucres du plant est à son maximum. Pendant la nuit, le plant continue la translocation des sucres à partir des feuilles et en utilise une partie pour la respiration. Les sucres contenus dans les fourrages à moissonner seront donc à leur minimum le matin, avant que la photosynthèse ne commence à nouveau. Il serait plus logique que la fauche au cours de la journée maximise les hydrates de carbone non structurés hautement digestibles (les sucres et l'amidon) et la sapidité du foin. Certaines recherches ont indiqué que c'était le cas.

Contre la fauche l'après-midi - la respiration des plantes

Quand un plant de fourrage est coupé, il ne sait pas encore qu'il est mort. Il croit avoir une chance de survie. Initialement, les plants sur le dessus des andains essaient de continuer la photosynthèse jusqu'à ce qu'ils soient limités par le manque d'humidité. La respiration qui utilise les sucres solubles se poursuit jusqu'à ce que le plant soit si sec que son métabolisme ralentit et arrête éventuellement. Plus la période de séchage est longue, surtout dans la phase initiale jusqu'à avoir perdu environ 60-65 % de son humidité, plus les pertes par la respiration sont élevées.

Les teneurs en sucres au moment de la fauche importent peu pour la vache. La qualité du fourrage est déterminée après la moisson et l'entreposage, dans l'auge. Les pertes des sucres par la respiration pendant la nuit sont plus grandes que ce qui est gagné en attendant l'après-midi pour moissonner. La recherche a démontré ce qui précède dans les états de New York et du Wisconsin. Vous ne savez plus quoi penser?

Conditions de séchage, humidité et température la nuit

Les résultats contradictoires des recherches semblent être liés au climat et au temps de séchage pendant les recherches. Les pertes par la respiration la nuit sont plus élevées quand les températures et l'humidité sont élevées. La recherche originale qui montrait des avantages à la moisson l'après-midi avait été menée dans l'Ouest des États-Unis, entre autres en Idaho et en Utah. Ces emplacements bénéficient de conditions de séchage rapides et idéales, avec une humidité faible et un ensoleillement intense. Rappelons qu'en ces régions du monde on moissonne le soir avec un peu de rosée pour éviter une perte de feuilles excessives. Les nuits y sont aussi plus fraîches, ce qui réduit la respiration.

En Ontario, nos températures posent des défis pour la moisson du foin

C'est tout un contraste avec les températures en Ontario et dans les provinces et les états avoisinants, où il faut s'accommoder d'une humidité élevée, de soirées chaudes et de diverses menaces toujours présentes de pluie. Nos pertes dues à la respiration la nuit sont potentiellement plus grandes. Certaines recherches dans le nord-est américain et au Québec ont montré des avantages potentiels de la moisson l'après-midi. C'est probablement accompagné de conditions de séchage exceptionnellement bonnes (ensoleillé, faible humidité, andains de densité faible). Par exemple, les conditions de séchage plus rapides d'une deuxième coupe plus légère par une excellente température de juillet peuvent améliorer les conditions et les sucres ajoutés compenseront les pertes de respiration. En réalité, lors de la moisson du foin en Ontario, ces conditions seront-elles uniformément présentes?

La fauche plus tard dans la journée exige aussi que la température soit clémente le jour suivant pour un bon séchage sans aucune pluie. Si vous connaissez nos données météorologiques, je doute que ce soit souvent le cas. Les dégâts dus à la pluie ou du foin trop mûr à cause d'un retard de la moisson ou parce que la météo n'accorde pas un jour supplémentaire, peuvent souvent éliminer tout autre avantage. Les producteurs ontariens n'ont pas souvent le luxe de retarder la moisson pour améliorer potentiellement les teneurs en sucres. Aussi, de nombreux agriculteurs moissonnent le foin le matin pour effectuer la mise en balles lieu l'après-midi.

Faucher le matin et « ensiler en une journée »

On obtient une meilleure qualité du foin quand on fauche tôt le matin avec des andains larges pour hâter le fanage puis quand on hache plus tard la même journée. Des recherches à Cornell University ont montré que cette approche améliore grandement la fermentation et l'énergie digestible. Même si les sucres sont à leur minimum au moment de la fauche le matin, les pertes de ces sucres par la respiration sont aussi minimisées par le fanage rapide et aucune perte de respiration la nuit. De façon similaire quand on fait du foin sec, la fauche avec des andains larges semble être plus avantageuse que l'après-midi pour améliorer l'énergie digestible du fourrage (voir « Ensilage préfané en andains larges »).

En conclusion

À mon avis, le bon moment pour faucher et obtenir du bon foin sec est quand vous pensez y arriver avant le prochain épisode de pluie. À moins que les météorologues ne prédisent d'excellentes conditions pour un séchage prolongé, il vaut mieux faucher le matin. Pour une qualité de foin améliorée, séchez-le et le plus vite possible. Mettez en oeuvre les outils suivants - faucher en andains larges, bien conditionner, faire un usage stratégique des faneurs, des râteaux à toupies ou des inverseurs d'andains (voir les « Conseils pour réussir un foin de commerce exempt de pluie et de moisissures »).

Pour plus de renseignements :

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Northern Ontario Agri-Food Education Y Marketing Inc.

NOAFEM Receives Support Funding

SUDBURY - Retired Teachers of Ontario (RTO) supports Northern MAPLE's visit to Thunder Bay, Kenora and Rainy River Districts with funding under RTO's Project – Service to Others.

NOAFEM received $2,000.00 when RTO District 4 – Sudbury/Manitoulin President Jacques Halle presented the cheque to Pat Marcotte at their annual general meeting on May 13th.

NOAFEM's project is one of 35 across the province receiving funding for 2010.

The funding is available to Ontario's retired teachers for community service activities.

Northern MAPLE participates in a recent Media Conference at Anderson Farm Museum in Lively.

Historical Farm Site Recognized

LIVELY – The Anderson Farm Museum in Lively received approval for funding from the City of Greater Sudbury City Council for a major renovation project to winterize the stable at the farm. The project will provide the public with a facility that can be used year-round for community activities, special events and educational programs. The project which will be completed in July, will allow seating for up to 80 people.

Since its formation in 2007, the Anderson Farm Museum Heritage Society has replaced the cedar shingles on the roof of the barn and farm house, replaced windows in the farm house and constructed display units in the loft of the barn to exhibit historical items original to the farm.

Anderson Farm operated as a dairy farm from 1916 – 1945. The City of Greater Sudbury offers facilitated tours of the site including the barn, milk house and farm house. Visitors to the site step back in time to get a feel for life on a dairy farm of the period.

Northern Ontario Agri-Food Education & Marketing Inc. supports the June educational program at the farm. Our educational program is a natural fit when Northern MAPLE can be included. There couldn't be a better location to teach children and adults alike about milk and the dairy industry that at a real dairy farm! The fact that this was once a working dairy farm and is now a historical site allows the whole story to be told – then and now.

Northern MAPLE provides an interactive addition to the program and encourages teachers to register their class for a visit. On average 800 students participate in the June program at the farm.

Children from Sudbury schools on a visit to Anderson Farm Museum and enjoy a carton of milk from Copper Cliff Dairy.

What's Happening?

1. 38 Agricultural Fairs across northern Ontario in June through September
2. 5 judging sites for Giant Pumpkin growers the second week of September
3. 23 Farmers' Markets (at least) across the north opening soon near you

Check our website for a complete listing: www.norontagrifood.org

NEOSCIA Biomass Conference

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careful not to let the fines escape. Then pelletize while the material is hot, as it won't stick when it is cold. RCG also needs a binder added to create solid pellets, as grass does not have the natural binder found in wood. You can add either 1 gal of hammered cardboard (a wood product) OR 800 ml. of spent brewers grain to every 5 gal of RCG. Commercial binders are also available.

RCG will produce more ash than wood, and although these pellets are less dense than wood, there is lots of heat. The benefit to the farmer is that RCG is often a highly productive "weed" specie that grows well on marginal land and can be put to work with little investment.

Ross McLeod, also from the Soo, (but working on the Ontario side for the Sault Ste Marie Innovation Center, or SSMIC.) is involved in alder and willow biofibre studies for short crop rotations. He is currently evaluating harvest methods for speckled alder on abandoned fields, and looking at the specie as a plantation crop. He has also been involved in feedstock testing of ag. residue such as industrial hemp, flax and RCG. Keep track of his work by visiting the SSMIC website!

The ideas presented by OMAFRA rep, Dr. Ian McDonald, are on page 11 of this issue.

Dennis Whiddifield of Cook Engineering in Thunder Bay spoke on Switchgrass pellets and corn stover "Briquetting". The Briqett process will densify a product and create a better fuel source by reducing water content, (also reducing shipping charges). It also decreases the need for a rain shelter for the product. The Briq is best for corn stover as it requires less grinding and the larger pieces are better for Ag industries that use stover for products other than fuel. They only need to be dried to 15% moisture (vs 10% for pellets), and they do not need after-process cooling. However, Briq presses only do 2-3 T/hr., vs 5-8T/hr. for pelletizers.

Switchgrass is a model energy crop for NW Ontario as it is native. After establishment it will give 10 years of growth at 4 to 5 T/ac.(2x to 3x the yield of wood biomass) with lower moisture.

Fall harvested switch is high in ash content and can form "clinkers" in a furnace, while the grass phosphate and chlorine content can cause corrosion. These problems can

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NEOSCIA Research Forum at Laurentian University

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NLARS's research with cattle and crop management (cereal and forage). He also discussed the relationships that NLARS has with other research groups and facilities. Hughes discussed the stations past work with cool season vegetables and their present research project regarding day neutral strawberries.

The forum was wrapped up by setting up "the next steps" in continuing networking, and building upon the connections made that day between researchers to researchers and farmers to researchers. The entire group complied a list of 'the next steps', which fall into five categories: network creation, network resources, project development, funding opportunities, and representation on Provincial funding boards. A work team was put in place to begin the process of putting the steps into action. The work team at this point in time consists of the following people: Mack Emiry, Murray Cochrane, Nick Betts, Errol Caldwell, Jonathon Waddell, MIRARCO, John Kovacs, and John Rowsell. To view the minutes of the forum please visit www.neoscia.wordpress.com.

Technology, NEOSCIA Networking, Agriculture?

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out your local Temiskaming or Nipissing weather at www.nipissingu.ca/faculty/johnmk/weather_NEOSCIA_NU.htm.

Most recently, NEOSCIA has put together a website inspired blog (www.neoscia.wordpress.com). The website features past Breaking Ground articles, going all the way back to 2006, and of course, they are only Northern Ontario focused article. The website also features information about agricultural biomass, pictures from past events, information about upcoming events, and so forth.

The most shocking social media phenomenon of all is (drum roll please), NEOSCIA has joined twitter. So start tweeting and follow us on twitter (www.twitter.com).

MONSANTO SCHOLARSHIPS

The Monsanto Canada Opportunity Scholarship Program is available for Canadian high school students who have successfully enrolled at a Canadian educational institution (degree or diploma courses) in a first-year agricultural program. Find the details at: http://www.monsanto.ca/about/scholarship/default.asp

NEOSCIA Biomass Conference

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be resolved by SPRING harvesting. There will be a 50% biomass loss, but this is the leaf which goes back to the field as organic soil matter.

Don McCabe of the OFA gave a rousing talk on the impact of government policy via the Green Energy Act. He insisted that farmers hold out for at least $150/T before considering the sale of bio-products. He feels that corn stalks should always be left in the field, but cobs can be sold. Harvesting willow and similar plantations should also be OK. However, farmers must determine exactly how mush biomass can be removed from a field without soil degradation.

Under the "Act", biomass, solar, and other new electrical energy systems are designed to give an 8-9% return on the investment. To improve on this, local communities should develop local (District) energy systems, as co-gen plants only use 25-35% of the energy burnt to produce electricity. The other 65-75% of the energy should be used to heat homes and hospitals, etc.

McCabe reminds us all that the only reason that Ontario is turning to Biofuel, solar, and wind is because of a 2003 election promise by Premier McGuinty. As such, farmers must be sure that they don't shortchange themselves when dealing with OPG. Farmers MUST make a profit from all products they sell. Bottom line: search out the required information, do risk mitigation, follow the KISS principal and don't sell until they show you the $$!

NEOSCIA Research Forum at Laurentian University

By Kelly Bird NEOSCIA Intern

On March 25, 2010, NEOSCIA with Monitoring (Mining), Innovation, Rehabilitation and Applied Research Corporation (MIRARCO) hosted the North Eastern Ontario Research Forum at Laurentian University, in Sudbury. Over thirty members of the agricultural, research and academia community in the north attended the event. The forum was organized in hopes to further develop relationships with members from each community, to encourage collaboration and cooperation, as well as, share information, projects and resources.

The Universities in attendance were Nipissing, Laurentian, Université du Québec, and Guelph Research Station. In addition, faculty from Sault Ste. Marie Innovation Center, Northern Ontario Research, Development, Ideas, Knowledge (NORDIK), OSCIA, FedNor, OMAFRA and MIRARCO. And of course, producers from across north eastern Ontario were valued members of the crowd at the Forum.

Over the course of the morning, and into the early afternoon, each university and organization individually presented research, projects and background information regarding their institutes. The first presenter was, Université du Québec, who discussed their research on growing forage in conjunction with nutrient management for cattle. The next to present was Sault Ste. Marie Innovation Center, part of Algoma University, which was represented by Ross MacLeod. He talked about his research on biofibre and biofuels in the Algoma area and the assistance innovation center provides local businesses to further develop relationships with associates of the science research field.

Following the innovation center's presentation, NORDIK, another organization from the Algoma area, was next to present. NORDIK was represented by David Thompson, who explained that NORDIK assists farmers in adding innovation to their products through the marketing concept of eating local. NORDIK is an organization that is grass roots based, connects the community with farmers, and develops local initiatives to encourage the development of agricultural commodities.

Laurentian University and MIRARCO, were the fourth to present at the Forum. Dr. Graeme Spiers explained how climate change is affecting agriculture today and the importance of practicing sustainable agriculture to assist with weather and climate risks. He also explained MIRARCO's research project on wasteland soil: the organization has been growing crops on mining tailings.

Nipissing University was next to present. Nipissing went into great detail introducing and going into the backgrounds of all of their staff in the Geography Department. They also talked about the weather station and satellite imaging projects which are currently taking place in conjunction with NEOSCIA.

New Liskeard Research Station Agricultural(NLARS) was the last presenter for the day. Both John Rowsell (Agronomy) and Becky Hughes (Horticulture) were representing the station. Rowsell discussed

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Technology, NEOSCIA Networking, Agriculture?

By Kelly Bird NEOSCIA Intern

President Janet Parsons wrote an article in the last issue of Breaking Ground entitled "2009 a banner year for NEOSCIA", and to be honest, it is a challenge to argue that statement.

The technological mountain that NEOSCIA has climbed in the past several months is almost frightening. Temiskaming Crops Coalition (TSCIA is under their umbrella) has introduced a blog (www.temiskamingcc.blogspot.com), to further develop communication, and networking among its members, crop specialists and producers. In addition, TCC's crop camera has finally been set-up with the Temiskaming weather station, and the website for the camera is up and running. Please do not hesitate about spying on the Jibb's field: http://64.25.187.10:81/Jpeg/CamImg.jpg. The field, the camera is located in, is currently growing Kain Wheat, planted on April 23rd.

The Nipissing weather station project, which has been discussed in great detail in previous issues, is still a large focus for the NEOSCIA and the University. Both the weather stations are still in place. Check

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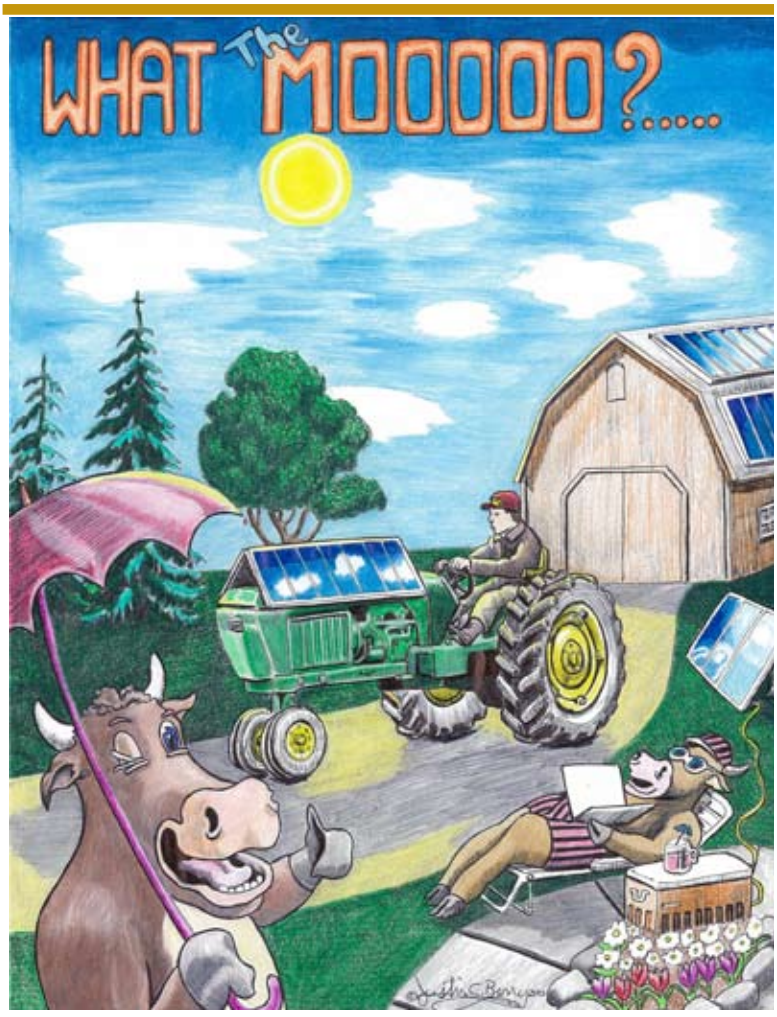

This month's artwork comes from Justin Burre of Englehart. View more of his work at http://justin-burry.tripod.com