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Welcome to ON Organic

Evan Elford, New Crop Development Specialist, OMAF & MRA

Season's Greetings from ON Organic!

Some exciting speakers will be sharing information across the province over the next two months including at the South West Agriculture Conference, EFAO Workshops, the Guelph Organic Conference, the Ontario Fruit and Vegetable Convention (OFVC), and Eco Farm Day.

To highlight one of the many sessions, this year in February, the Organic Session at the OFVC in Niagara Falls will have a special focus on pest management. Our feature speakers are Dr. Eric Gallandt from the University of Maine, and Drs. Jason Deveau and Melanie Filotas from OMAF and MRA. Dr. Gallandt will lead off the session with an overview of his research and on-farm examples of organic weed management in horticultural crops followed by other information related to organic pest management in horticultural crops by the two specialists from OMAF and MRA. For more information, please visit the OFVC website at www.ofvc.ca.

Also, a reminder from last month's newsletter for students completing admissions applications for 2014 college and university programs that a list of diploma and degree programs in organic agriculture and horticulture are available on the Organic Agriculture Centre of Canada website. Please visit their website for more information at www.organicagcentre.ca.

As always we welcome your comments and any suggestions for topics in the newsletter. Thank you once again to our contributing authors and to EFAO, OCO and others who pass along our newsletter on a regular basis.

Subscription to this newsletter is easy and free. For details go to the webpage:

<http://www.omafra.gov.on.ca/english/subscribe/indx.html#organic>

The newsletter is also posted on the OMAF and MRA website at:

<http://www.omafra.gov.on.ca/english/crops/organic/news/news-organic.html>

The French version of these newsletters is available at:

<http://www.omafra.gov.on.ca/french/crops/organic/news/news-organic.html>

The OMAF and MRA Organic pages are linked from:

<http://www.ontario.ca/organic> and <http://www.ontario.ca/biologique>

The ON Organic Team

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Jacque De Fields – OMAF and MRA, Client Service Representative

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On to a Good Start: Colostrum Management

Mario S. Mongeon, Livestock Specialist, Alfred Resource Centre, OMAF and MRA

Calving is a stressful period for the cow as well as the newborn calf. A difficult calving can result in lost production, infection and poor fertility on the part of the dam. The newborn calf may be weak and suffer from bovine respiratory disease or diarrhea as a result of its experience and may even not survive.

Mortalities in the first 3 weeks of life have been attributed to Failure of Passive Transfer (FPT) of immunity from the dam to the newborn calf. The only way a calf receives immunity after birth is through colostrum. Antibodies, also called immunoglobulins or Ig, are present in the colostrum from the mother and passed on to the calf. For a short period of time after birth, those immunoglobulins will be absorbed intact through the small intestine membrane into the blood stream. These immunoglobulins will help the calf fight against disease during the first few weeks of life. This is why it is so important to have excellent colostrum management. Colostrum is secreted by the cow right before and shortly after calving. True colostrum comes only from the first milking as later milkings are less concentrated in nutrients and immunoglobulins. Leakage from the udder prior to calving will reduce the concentration of Ig in the dam's colostrum once the calf is born.

The three "Q's" to achieving successful passive transfer of immunity through immunoglobulins are: Quality, Quantity and Quickness. Feeding quality colostrum in the right quantity quickly after birth will greatly improve the chances of calf survival, good health and future performance.

Quality

Colostrum contains more energy and protein than milk. The amount of immunoglobulins per millilitre of colostrum as well as its cleanliness will determine its quality. In order to minimise the contamination of colostrum, the udder needs to be properly cleaned. Milking, storage and feeding equipment should also be sanitized. The colostrum fed to the newborn calf should contain at least 50 mg/ml of IgG and ideally, no more than 100,000 colony forming units/ml (an estimate of bacteria number). It is possible to use a Brix refractometer to measure the immunoglobulin concentration in colostrum. The Brix refractometer is designed to measure the amount of sucrose (table sugar) in a solution, such as maple syrup. It is possible to relate the Brix values to IgG in colostrum. A Brix value of 22 % corresponds to 50 mg of IgG per ml. A Refractometer is easy to use, reliable and reasonably priced (\$175.00 – \$350.00) and can be purchased online. The optical model is cheaper than the digital one but can be trickier to read. Look for a refractometer with a Brix scale ranging more or less from 0 to 30 %. Colostrum quality decreases quickly after calving so collection should occur within the first few hours. Colostrum from Johne's positive cows should not be used. Suspicious looking, visibly mastitic, discolored, bloody or watery

colostrum should be discarded as well. Freshly harvested colostrum should be fed right away or refrigerated or frozen within one hour to prevent bacterial growth. Refrigerated colostrum should be stored for no more than 48 hours. Surplus colostrum can be frozen and used when the colostrum quality from the dam is questionable. Since the Ig concentration tends to increase with lactation numbers, freezing colostrum from older cows makes sense. Frozen colostrum can be kept for up to one year. Thawing technique is critical. Avoid exposing colostrum to temperatures exceeding 40° C. Once thawed, colostrum should be fed right away as bacterial growth will resume.

Quantity

Feed colostrum as soon as possible after birth at a rate of 12% to 15% of the calf's body weight which represents at least 3 to 4 litres depending on breeds. Large breeds such as Holsteins should get at least 4 litres of excellent quality colostrum shortly after birth and 2 more litres within 12 hours of birth. A large volume of colostrum cannot overcome low antibody (IG) concentration. This is why testing for quality is so critical. According to research, the best way to make sure calves get the colostrum they need, on time, is to milk the cow and feed a known quantity of colostrum to the newborn calf.

Quickness

A newborn calf should receive colostrum as soon as possible after birth. The ability of the calf to absorb immunoglobulins through the gut wall decreases rapidly from 0 to 6 hours after birth. As a matter of fact, the calf is only able to absorb IG intact for the first 30 hours of life (Table 1). Once this critical period is over, IG will be digested as any other protein in the calf's digestive system. Difficult calving and allowing the calf to suckle on its own are conditions that have been shown to contribute to Failure of Passive Transfer. Calves that were born unassisted but allowed to suckle on their own do not fare as well as they probably do not receive first colostrum in a timely manner. Research indicates that 25% of calves left alone DO NOT nurse within 8 hours of birth.

Post partum Delay	IG blood concentration
1 hour	23.0 mg
5 hours	17.7 mg
9 hours	12.5 mg
30 hours	0 mg

Table 1: Immunoglobulin absorption by the calf over time.

Using Livestock Manure Properly to Ensure Food Safety

Wayne Du, On-Farm Food Safety Specialist, OMAF and MRA

Do you use soil amendments such as manure or composted manure? Are you aware of the food safety risks? Here are some helpful tips to protect your crop from potential contamination.

What is the difference between manure and composted manure?

- Manure is raw or untreated animal excrement with or without bedding.
- Composted manure is the manure that has been treated or processed to eliminate or reduce harmful bacteria.

Tips for Using Composted Manure:

- Ensure manure is composted following proper compost procedures to ensure pathogens are reduced to an acceptable level. Factors affecting proper compost:
 - a. Temperature: general rule: 55 °C for 3 days/turning interval for 15 days.
 - b. Carbon Nitrogen ratio: ideal C:N ratio of 25:1 or 30:1.
 - c. Aeration: accomplished by frequent turning of the pile.
 - d. Moisture: ideal 50-60% water by weight.
- Clean and sanitize any equipment used to handle raw manure before handling finished compost and between uses.
- If purchasing composted manure, request a certificate of analysis or documentation of treatment method from the supplier to ensure the composting process has been completed.

Tips for Using Manure:

- When possible, avoid using manure which poses a greater risk for microbial contamination than composted manure.
- Incorporate manure into the soil within 24 hours after application to minimize contamination to adjacent crops from wind drift or runoff.
- Establish 5-10 metre vegetated areas along water ways to reduce the potential for pathogens entering surface water.
- Do not apply manure on frozen soil or when it is raining.
- Take precautions when using manure to fertilize produce crops that can be consumed raw:
 - a. Ensure a minimum of 4 months between manure application and harvest.
 - b. Ensure manure does not come into contact with the edible part of the crop.
 - c. Apply manure post-harvest.
 - d. Apply manure in non-fruited years.

For more information on manure and composting, proper handling and application and storage requirements, refer to the Ontario Nutrient Management Act and OMAF/MRA's Factsheets on manure composting.

Food safety is everyone's responsibility. To attend our free online workshops on manure use and other important food safety topics, visit us at: www.ontario.ca/foodsafety or call: 1-877-424-1300. Food safety practices keep agri-food businesses competitive, productive and sustainable.

Funding Opportunities

Scholarships and Bursaries for EFAO Winter Workshop Series

Scholarships (4 available): Scholarships will cover the cost of the workshop, and a complementary one year membership, up to a \$120.00 value! Scholarship recipients will be asked to provide support to the workshop coordinator on the day of the event (taking photos, notes, helping with registration and set-up), and be asked to contribute an article about some aspect of the workshop for the EFAO newsletter.

Bursaries (4 available): In order to be eligible for a bursary you must be a current EFAO member. If you are not a member please take out a membership prior to submitting your application letter. Visit www.efao.ca/membership/ or call 519-822-8606 for information on becoming an EFAO member.

Each bursary will cover the full cost of your chosen workshop, up to an \$80.00 value. Please submit a letter briefly telling us who you are, and how participating in the workshop will contribute to your ecological farming education, or plans. Make sure you indicate which of our winter series workshops you would like to attend.

Note: if you are applying for the half day workshops on **Friday only** you may apply for both the Biologically Intensive Market Garden Design (Morning) and Social Media and Direct Marketing (Afternoon) sessions.

Please submit your letter of no more than 500 words to Rebecca Hodges at rebecca@efao.ca. All submissions must be received by Wednesday, January 15, 2014 and recipients will be notified by Friday, January 17, 2014.

Funding Opportunities (Cont'd)

Local Food Fund

The Local Food Fund is a three-year initiative with funding of up to \$10 million per year to support innovative local food projects that reduce barriers to regional economic development; result in sustainable regional economic development; and have a positive impact on the Ontario economy.

The Fund will support projects in four categories:

1. Regional and Local Food Networks
2. Enhanced Technologies, Capacity and/or Minor Capital
3. Research and Best Practices
4. Education, Marketing and Outreach

For more information and guidelines, please visit the OMAF and MRA website at:

www.omafra.gov.on.ca/english/about/localfood.htm

Growing Forward 2 Funding Assistance Program for Producers, Organizations and Collaborations

Growing Forward 2 (GF2) is a federal-provincial-territorial program aimed at encouraging innovation, competitiveness and market development in Canada's agri-food and agri-products sector. In Ontario, farm, food and bioproduct businesses, collaborations and organizations can build their own plan and select opportunities to help grow their profits, expand their markets and manage risks.

Areas of Focus for GF2 Funding Assistance

Producers, organizations and collaborations can apply for funding assistance in six focus areas, with an emphasis on innovation:

- Environmental and Climate Change
- Assurance Systems (Food Safety, Traceability and Animal Welfare)
- Market Development
- Animal and Plant Health
- Labour Productivity Enhancement
- Business and Leadership Development

Capacity Building Funding Assistance

Cost-share is available to support eligible clients to acquire additional skills, to undertake in-depth assessments and audits, and to develop business plans.

Building capacity helps prepare clients to apply for further cost-share to implement a project. Applications for capacity building funding assistance will be accepted on a continuous basis.

Some examples of Capacity Building activities are:

- Cost-share fees for qualified consultants (e.g. Professional Engineer) to conduct an assessment.
- Produce a written report and plan that provides recommendations for implementing improved irrigation and fertigation management BMP's (e.g. field and greenhouse operations).
- Energy Use Assessment for existing farm buildings that will reduce the dependency on power and fossil fuels and reduce greenhouse gas emissions.
- Prevention plan for Wildlife Damage - help reduce crop, livestock or property damage caused by managed wildlife species.
- Market Assessment, Marketing Plan, Communication Material Design.
- Integrated Pest Management Planning.
- Cost of Production Assessment.
- Succession Plans, Expansion Plans, Human Resources, Business Plan.

Implementation Funding Assistance

Clients may be eligible for cost-share for projects that help to achieve their business goals. Applications for project implementation will be reviewed and assessed based on merit. Having a detailed business and/or workplan, budget and applicable permits and approvals in place prior to submitting an application will increase your success in securing cost-share. Individual farm businesses may be eligible to receive up to \$350,000 over the five-year program (April 1, 2013 to March 31, 2018). Producers are strongly encouraged to attend a free capacity building workshop such as Canada-Ontario Environmental Farm Plan (New 4th edition) and Growing Your Farm Profits.

Important Dates: December 16, 2013 to January 30, 2014 – Application intake for Implementation Funding Assistance from all eligible clients including, producers, organizations and collaborations.

Please visit the GF2 website at: www.ontario.ca/growingforward2

OMAF and MRA have a full listing of programs and services for Ontario farmers on the website and in the Factsheet 'Programs and Services for Ontario Farmers'. For more information please visit: www.omafra.gov.on.ca/english/busdev/facts/progserv.htm or call the OMAF and MRA Agricultural Information Contact Centre to request a hard copy of the Factsheet at 1.877.424.1300.

College and University Campus-based Programs for 2014

(Listing from the OACC)

Many diploma and degree programs offer courses in organic or sustainable agriculture both on campus and online. The listing below is for campus-based diploma and degree programs. If you are aware of other diploma or degree offerings in organic or sustainable agriculture across Canada, please let us know and we will update this list for next month's ON Organic newsletter.

Atlantic:

The Faculty of Agriculture of Dalhousie University offers an on-site, degree credit course in **Principles of Organic Horticulture** (HORT2001). Students taking courses in the

Topics in Animal Production series (AS490, AS492, AS494) for degree credit will also have an opportunity to select a module in **Organic Dairying**. For more information, please see: [Faculty of Agriculture](#)

British Columbia:

The University of British Columbia offers a course in sustainable agriculture. For more information, please see: [Key Indicators of Sustainable Agriculture](#)

Kwantlen Polytechnic University offers a Bachelor of Applied Science in Sustainable Agriculture at their Surrey, Richmond and Langley campuses.

[Bachelor of Applied Science in Sustainable Agriculture Overview and Course Listings](#)

Ontario:

The Ontario Agricultural College (OAC) of the University of Guelph is a network of colleges that offers degree and diploma courses in agriculture and horticulture. The Guelph, Kemptville, and Ridgetown campuses offer instruction in English and the Alfred campus offers instruction in French. The Guelph campus offers:

- [B.Sc.\(Agr\) in Organic Agriculture](#)
- [Guelph's Organic Agriculture program](#)
- [Department of Plant Agriculture](#)

At the Alfred and Kemptville locations, diploma courses are offered in Organic Plant Production, Organic Animal Production, Organic Fertilization, and Biodynamic Production. Check the links below to find out which courses are offered at each location.

- [Organic Diploma Course Descriptions/Locations](#)

Quebec:

The Macdonald Campus of McGill University offers Ecological Agriculture as a minor for students registered in the B.Sc. program and as a certificate program for students who have already completed a first university degree (B.Sc.). There are several core courses in the programs that are strongly oriented towards organic agriculture, and the complementary courses either have some organic content or are focused on some aspect of ecology.

- [Ecological Agriculture Program Information/Course Descriptions](#)

Organic Agriculture Centre of Canada (OACC) Web-based Courses

Web-based university-level course credits and non-credit courses are available through the OACC and many can be used to work towards a Certificate of Specialization in Organic Agriculture. A listing for the winter 2014 semester courses can be found at http://www.oacc.info/Courses/course_web.asp and additional details on the certificate can be found at <http://www.oacc.info/Courses/certificate.asp>.

Certificate in Sustainable Agriculture – Hosted by Agriculture Solutions Inc.

Date: January 27-30, 2014 (four day course)

Location: The Delta Hotel, 50 Stone Road West, Guelph, Ontario

For more information and to register please visit www.agriculturesolutions.ca/events or call 1.855.247.6548. For more information, please refer to pages 9 & 10

EFAO Kitchen Table Meetings

There are numerous Kitchen Table Meetings taking place through the winter. Please visit the EFAO website for more information at www.efao.ca

Conferences, Meetings and Tours

Southwest Agriculture Conference

Date: January 7 & 8, 2014

Location: University of Guelph Ridgetown Campus, Ridgetown, Ontario

An organic session is being planned for the 2014 conference. Speaker details will be provided closer to the conference date.

For more information please visit the website at www.southwestagconference.ca

Winter Workshop Series from EFAO

1. Diversified Ecological Heritage Grain Production Panel Discussion

Date: Wednesday January 29, 2014 (10:00 am - 3:00 pm)

Location: Dublin St. United Church, 68 Suffolk St W Guelph, ON

Member Cost: \$80.00

Non-Member Cost: \$105.00

Register and pay online at www.efao.ca/upcoming-events/ or call the EFAO office 519-822-8606

This session is made possible by the [Bauta Family Initiative on Canadian Seed Security](#)

There are a growing number of farmers producing heritage field crops in small-scale diversified farming operations. Farmers have been cultivating heritage grains for centuries and these crops are the backbone of the varieties used today in modern agriculture. However bringing these varieties back into circulation while sustaining an economically viable farming operation is unclear. Learn from three diversified heritage grain producers as they share their best practices and discuss how they are responding to the agronomic and economic challenges of growing diversified heritage grains in ecological farming conditions.

Panelists:

Paul Spence: [LoMaximo Meats](#), Chatam-Kent, ON.

Chris Wooding: [Ironwood Organics](#), Gananoque, ON.

Thor Oechsner: Oechsner Farms, [Farmer Ground Flour](#), and [Wide Awake Bakery](#), Trumansburg, NY.

2. Like it, Pin it, Tweet it! Exploring Social Media Online and Direct Marketing for Farmers

Date: Friday January 31, 2014 (1:00 pm - 4:00 pm)

Location: OMAF Building, 1 Stone Rd. Guelph ON

Member Cost: \$40.00

Non-Member Cost: \$65.00

Register and pay online at www.efao.ca/upcoming-events/ or call the EFAO office 519-822-8606

Explore the world of social media and online direct marketing techniques for promoting your farm business. Participants will get tips to help develop their online presence

through various social media and online marketing platforms and learn from the experiences of other farmers about how to best create and effective online communications strategy for direct marketing. This course is best suited for farmers who are already familiar with social media tools and would like to take their online marketing strategy to the next level.

Moderator: Jennifer Kucharczyk, *Communications Coordinator, Sustain Ontario*

Panelists:

Erica Lemieux; [City Seed Farm](#) Toronto, ON.

Dana Thatcher; [Thatcher Farms](#), Rockwood, ON.

3. Farmstead Cheese Making Panel Discussion (Plus a Cheese Retail Tour at [Ouderkerk & Taylor](#) and a cheese tasting at [OX Restaurant](#))

Date: Friday January 31, 2014 (9:45 am - 2:30 pm)

Location: 10 Carden St. Guelph ON

Member Cost: \$65.00

Non-Member Cost: \$90.00

Register and pay online at www.efao.ca/upcoming-events/ or call the EFAO office 519-822-8606

This introductory session is geared towards those exploring the idea of starting a small-scale sheep or goat dairy and would like more information on how to produce farmstead cheese for market. The panel discussion will be followed by a tour of [Ouderkerk & Taylor](#), and a cheese tasting and social at [OX Restaurant](#). *The following topics will be discussed;* on-farm infrastructure, costs and considerations when starting out, equipment, opportunities and challenges for new farmers, appropriate breeds, and animal husbandry. This session will be appropriate for those who are in the exploratory phase, or already keeping a small flock of milking animals.

Panelists:

Elisabeth Bzikot: [Ewenity Dairy Co-operative and Best Baa Farm](#), Fergus, ON

George Taylor: [C'est Bon Cheese](#), St Mary's, ON

Julie Belli: [Harmony Tree Farm](#), Uxbridge, ON

4. Biologically Intensive Market Garden Design

Date: Friday January 31, 2014 (9:00 am - 12:00 pm)

Location: OMAF Building, 1 Stone Rd. Guelph ON

Member Cost: \$50.00

Non-Member Cost: \$75.00

Register and pay online at www.efao.ca/upcoming-events/ or call the EFAO office 519-822-8606

Jean-Martin Fortier, author of the [The Market Gardener](#), recently translated into English with the help of FarmStart's

Conferences, Meetings and Tours (Cont'd)

online campaign, is returning to Guelph for another EFAO workshop! Last year we learned how he and his wife manage to sell more than \$130, 000 worth of vegetables grown on 1.5 acres of land.

This year Jean-Martin will focus in on explaining his proven low-tech, high-yield methods of production.

You will hear detailed information on the techniques, tools, and appropriate technology that make [Les Jardins de la Grenlinette](#) a productive and profitable micro-farm. In this session you will receive information which you can directly apply to your market garden, and help you grow better before you grow bigger. *This event is part of an Ontario speaker tour hosted by FarmStart. For other locations and dates check the FarmStart website www.farmstart.ca.*

Jean-Martin Fortier and his wife Maude-Hélène Desroches are the founders of Les Jardins de la Grenlinette, an internationally recognized micro-farm known for its high productivity and profitability using low-tech, high-yield methods of production. He has written articles about his work for popular magazines such as *Canadian Organic Grower*, *La Terre de Chez Nous* and *Growing for Market*, and he has facilitated more than fifty workshops and conferences in Europe, Canada and the US. Jean-Martin also contributes occasionally as a tool and equipment advisor for companies such as Johnny's Selected Seeds and Du-bois Agri-Innovation. His first book, *Le Jardinier-Maraîcher* sold more than 15,000 copies in the original French language since its release in the fall of 2012.

Catching the Wave - Guelph Organic Conference & Expo 2014

Date: January 30-February 4, 2014

Location: Guelph University Centre, Ontario

OMAF and MRA will be presenting two workshops at the 2014 conference.

For more information please visit the conference website at www.guelphorganicconf.ca or call 519.824.4120 ext 56311

Ontario Fruit and Vegetable Convention (OFVC)

Date: February 19 & 20, 2014

Location: Scotiabank Convention Centre, 6815 Stanley Avenue, Niagara Falls, Ontario

Organic session will include Eric Gallandt (University of Maine): A systems perspective on weed management: cultivation, rotation, cover crops, and the weed seedbank.

Jason Deveau, OMAF and MRA: Application of organic amendments and pest control products.

Melanie Filotas, OMAF and MRA: Pest control for organic horticultural production

For more information please visit the website at www.ofvc.ca

Eco Farm Day, 2014

Date: February 22, 2014

Location: The Ramada Inn, 805 Brookdale Ave, Cornwall, Ontario

Advance registration available online or by mail.

Registration fee includes lunch:

Regular Adult – \$56.50 (\$67.80 at door)

COG/Organic Meadow Member – \$45.10 (\$56.50 at door)

Student – \$28.25

Senior – \$33.90

For more information and a complete conference brochure, please visit the website at www.cog.ca/ottawa/eco-farm-day

Links to ON Organic Information & Staff Contacts

OMAF and MRA Horticulture Staff

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Elaine Roddy	Vegetable Crop Specialist	519-674-1616
Kathryn Carter	Tender Fruit & Grape Specialist	905-562-1639
Leslie Huffman	Apple Specialist	519-738-1256
Kristy Grigg-McGuffin	Pome Fruit IPM Specialist	519-426-4322
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Wayne Brown	Greenhouse Floriculture Specialist	905-562-4141, x179
Graeme Murphy	Greenhouse Floriculture IPM Spec.	905-562-4141, x106
Shalin Khosla	Greenhouse Vegetable Specialist	519-738-1257
Gillian Ferguson	Greenhouse Vegetable IPM Spec.	519-738-1258
Pam Charbonneau	Turfgrass Specialist	519-824-4120, x52597
Jennifer Llewellyn	Nursery Crops Specialist	519-824-4120, x52671
Todd Leuty	Agroforestry Specialist	519-826-3215
Mahendra Thimmanagari	Crop Bioproducts Specialist	519-826-4593

OMAF and MRA Field Crop & Livestock Staff

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Tracey Baute	Entomologist, Field Crops Prgm Lead	519-674-1696
Scott Banks	Emerging Crops Specialist	613-258-8359
Gilles Quesnel	IPM Field Crop Program Lead (Bil)	613-258-8250
Bonnie Ball	Soil Fertility Specialist	519-271-9269
Adam Hayes	Soil Management Specialist	519-674-1621
Greg Stewart	Corn Industry Program Lead	519-824-4120 x54865
Michael Cowbrough	Weed Mgmt Field Crps Prgm Lead	519-824-4120 x52580
Joel Bagg	Forage Specialist	705-324-5856
Christine Brown	Nutrient Mgt Field Crops Prgm Lead	519-537-8305
Brian Hall	Canola & Edible Bean Specialist	519-271-0083

Livestock

Tom Wright	Dairy Cattle Nutritionist	519-824-4120 x56281
Jaydee Smith	Swine Prod Systems Program Lead	519-674-1542
Mario Mongeon	Livestock Specialist (Bil)	613-679-0937
Albert Dam	Poultry Specialist	519-824-4120 x54326
Brian Lang	Dairy Cattle Prod Systems	519-537-8786
Doug Richards	Swine Grower-Finisher Specialist	519-482-3133
Ron Lackey	Feed Ingredient & By-product Specialist	519-271-7407
Anita O'Brien	Sheep & Goat Specialist	613-258-8299
Brian Tapscott	Alternative Livestock Specialist	519-846-3400
Chisptoph Wand	Beef Sheep & Goat Nutrition	519-824-4120 x53670
Brian Pogue	Beef Cattle Program Lead	519-826-5106
Nancy Noecker	Beef Cow/Calf Specialist	613-258-8476
Delma Kennedy	Sheep Specialist	519-846-3398
Steve Naylor	Aquaculture Specialist	519-826-3172
Tom Hamilton	Beef Cattle Production	705-647-2087
Jack Kyle	Grazier Specialist	705-324-5855

Links to Organic Agriculture Information

Organic Council of Ontario (OCO)

<http://www.organiccouncil.ca>

Canadian Organic Growers (COG)

<http://www.cog.ca>

OMAF and MRA Organic Agriculture

<http://www.ontario.ca/organic>

Ecological Farmers of Ontario (EFO)

<http://www.efao.ca>

Organic Agricultural Centre of Canada

<http://www.oacc.info>

FarmStart www.farmstart.ca

Agricultural Information

Contact Centre:

1-877-424-1300

E-mail: ag.info.omafra@ontario.ca

Northern Ontario

Regional Office:

1-800-461-6132

www.ontario.ca/omafra

33RD ANNUAL
GUELPH ORGANIC CONFERENCE
& EXPO 2014



January 30 to February 2, 2014
Guelph University Centre, Ontario, Canada

guelphorganicconf.ca

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World renowned expert, Graeme Sait, comes to Ontario to teach 4-day course in Sustainable Farming

The Certificate in Sustainable Agriculture is an internationally-acclaimed four-day course for farmers and growers.

Graeme Sait's practical approach and easy-to-follow methods take the mystery out of the soil-to-plant relationship and give you a simple, logical pathway to growing healthier crops.

This is an important course for anyone who is serious about the future of agriculture. This course has made a difference for thousands of farmers around the world and it will make a difference for you, too. The course includes a combination of lectures, hands-on workshops and take-home guidebooks that teach:

- Reducing chemical dependence & increasing fertilizer efficiency
- Accessing soil nutrient reserves
- Improving water management and soil structure
- Boosting both your health and the health of your livestock
- Acquiring simple strategies to combine with existing practices

This course is approved by the American Society of Agronomy and eligible for 28 continuing education units (CEUs) to maintain professional certifications in Ontario.



Graeme Sait is the internationally acclaimed author and educator who co-founded Nutri-Tech Solutions (NTS) 19 years ago. He has written hundreds of articles and a popular book "Nutrition Rules!". Graeme has formulated many of the soil health and human health products for which NTS is renowned. He is a powerful presenter who speaks at conferences and seminars around the globe and his inspiring presentations are often described as "life changing".

January 27-30, 2014

The Delta Hotel
50 Stone Road W, Guelph, ON

*For more information
and to enroll, go to:*
www.agriculturesolutions.ca/events
or call 855.247.6548



4-day Certificate in Sustainable Agriculture

course outline

monday - mineral management

Soil Therapy™ Explained – Albrecht balancing in 21st Century Agriculture
 Calcium, Boron & Silicon – understanding the synergy of the terrific trio
 The Remineralising Imperative – the mineral link to animal and human health
 Phosphorus and Magnesium – the sugar building synergists
 Nitrogen & Sulphur – the power of protein builders
 Potassium & Sodium – achieving balance for quality enhancement
 Trace Elements – the law of the minimum
 Workshop – soil sampling, soil test interpretation

tuesday - microbe management

Farming Soil-Life – pushing the paradigm shift
 Humates – for mineral magnification and stability
 The Soil Foodweb – the benefits of biological balance
 The Microbial Link to Nutrient Retention, Availability and Stability
 Feeding the Soil – microbial enhancement & green manures
 Specialist Inoculums and their Roles
 Nitrogen Fixation – tapping into the mother lode
 Sustainable Herbiciding
 Soil-Life Protection & Stimulation – new innovations
 Composting & Compost Teas – introduction
 Paramagnetism – light for the root zone
 Workshop – compost tea brewing, under the microscope

wednesday - plant management

Climate Change & Fusion Farming
 The Secrets of Foliar Fertilising
 DIY Foliar Magnification – humic & fulvic acids, aloe vera & other bio-stimulants
 Seed Treatments
 Plant Therapy™ & The Big Four
 Growth Stimulants & Kelp
 Workshop – leaf sap monitoring: refractometers, sap pH, sap potassium/nitrate/sodium

thursday - pest management

Chemical v's Biological Pest Management
 IPM and IDM strategies
 Biological Inoculums – for disease management
 Sap pH – manipulation for fungal control
 The link between Brix Levels & Disease Pressure
 Weed Management Strategies
 Botanical Extracts – use for insect management & plant growth promotion
 Nematode Management
 New Directions in Pest Management
 Compost Tea for Broad-Spectrum Disease Management

all days - human health management

Nutrition Rules, Detox, Magnesium and Prostate Health
 The Soil Health/Human Health Link
 The Remineralising Imperative
 Digestion and Disease
 The Power of Probiotics – human microbe management
 Workshop – zinc testing, saliva pH, blood pressure monitoring, heavy metal analysis, blood oxygen levels, general vitality, calcium, iodine, magnesium and selenium hair testing

To register, go to www.agriculturesolutions.ca/events

