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Welcome to ON Organic

Evan Elford, New Crop Development Specialist, OMAF & MRA

With a turn to more 'spring like' weather this month, many people are thinking about managing cover crops which were planted last fall. For a short summary of cover crop management and termination, please link to the [Cover Crop Opportunities and Management](#) article from last fall's Crop Talk newsletter.

We want to hear from you! Are there livestock or crop management issues you are facing or would like to learn more about? Please let us know so we can address it for you (and others) in an upcoming newsletter!

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/index.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>

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Starting the Pasture Season

Jack Kyle, Grazier Specialist, OMAF and MRA

As I write this article the temperatures are still cold and there is snow everywhere, the winter of 2013-14 just does not want to go away! By mid to late May the pastures will be in a rapid growth stage and you will be setting the stage for the 2014 grazing season. Don't overgraze those fields, keep a residual grass height of 3-4 inches so that there is lots of leaf area to intercept sunlight and photosynthesize into plant growth. The root system is a mirror image of the top growth; short plants have shallow roots and will be much more prone to drought conditions. Deep rooted plants can find moisture throughout a prolonged dry spell.

Watch the growth in all your pastures and move cattle frequently enough to get to that last pasture before the plants have headed out and are so large that the cattle have difficulty biting them off and swallowing. Animal intake is very much a function of bite size, a big bite of easily swallowed grass will result in higher intakes and more productivity in the form of gain and milk production.

The fertility of pastures can be maintained by applying compost or manure immediately following a grazing rotation. Include legumes in the pasture sward to provide nitrogen to the legumes and grasses. Ideally pastures will have greater than 50% legume content – alfalfa, white clover, trefoil and red clover are all excellent pasture legume species.

Utilizing a rotational grazing system that has the livestock moving to a fresh paddock every 1-3 days will give much more even distribution of manure and urine resulting in more even plant growth throughout the paddocks.

Sub-divide paddocks, ideally livestock are on a fresh patch of pasture every day and certainly every five days. Fresh pasture means better intakes, less wastage through tramping, laying and fouling with manure and urine, less over grazing that slows the growth of those plants that have been grazed shorter than 3-4 inches. Frequent moves also improve the distribution of manure and urine on the pasture which will promote more even plant growth. Sub dividing can be easily accomplished with an electric wire on a reel and a few step-in-posts; a few minutes invested in temporary sub dividing fences will pay very significant dividends in increased pasture productivity.

Annual crops and cover crops can provide extra pasture for late summer and into the fall. Can you seed into cereal stubble after grain harvest? Did you frost seed red clover into your wheat fields – it can be grazed in September – November. Brassicas, cereals, sorghum-sudan grass, are all options to provide extra pasture or forage from fields that would otherwise be sitting idle from late summer into late fall.

Springtime in the Orchard: Organic Strategies for Apple Pest Management

Kristy Grigg-McGuffin, Pome Fruit IPM Specialist, OMAF and MRA

With the temperature gradually increasing, buds are swelling and green tip is just around the corner in many of the early apple growing regions of the province. Spring is a great time to get a head start on pest control in the orchard, before insect populations or disease inoculum build, and actively growing tissue and dense foliage makes management a little trickier. If you haven't already, now is the time to begin thinking about IPM strategies that can be done over the next few weeks that will help reduce the likelihood of chasing certain pests later in the season.

DORMANT OIL

While a dormant or delayed dormant oil spray can be an excellent management tool, timing and thorough coverage are critical to achieve good control. Understanding how oil works, as well as the biology of

the pests will help to optimize control applications and avoid tissue damage.

Oil can work by suffocation, interfering with egg development, and/or prevent settling of scale crawlers. If applied properly, the use of dormant or delayed dormant oil can sufficiently reduce the scale or mite populations respectively that could develop later in the season. Once these pests have become established, they can be very difficult to eradicate. Early season oil sprays also fit well into organic programs because the product is applied before predatory mites and other beneficial insects are present.

There are several species of scale insects affecting apples; **San Jose scale** is the most common in Ontario orchards. This insect overwinters as an immature scale

Springtime in the Orchard: Organic Strategies for Apple Pest Management (Cont'd)

on the bark until tree sap starts moving in the spring (*Figure 1*). Dormant oil is the best timing for control of this pest while there is little foliage preventing sprays from reaching the trunk and branches. The use of summer oil has shown to have effective, long-lasting control over scale in some Ontario orchards, but is often difficult to time and may not be as reliable as a dormant spray.



Figure 1. Overwintering San Jose scale on apple twig.

European red mites overwinter as eggs (*Figure 2*) on roughened bark around the bases of buds and spurs, or in the inner parts of the tree close to the main trunk and branches. Oil sprays should be applied before egg hatch, which often occurs around half-inch green or tight cluster. Some growers in Ontario, who have used dormant oil with sufficient water volumes and good coverage, have achieved excellent mite control with few summer escapes. Delayed dormant oils may also kill overwintering **aphid eggs**, if the timing coincides with hatching.

Unfortunately, optimal timing for scale is not necessarily the same for mites. If harvest assessments last year indicated scale is a bigger issue in the orchard, oil needs to be applied before bud break. This efficacy against scale is significantly reduced with later oil applications timed for mites. Be mindful that a tree carrying a few infested fruit last season can result in large scale populations this year if not properly managed.



Figure 2. Overwintering European red mite eggs on apple spur.

Although most horticultural oils have become quite refined, with sulphur impurities removed, even "summer" oils may still cause crop injury when applied:

- with or too close to products containing sulphur; do not apply oil within 14 days before or after these products.
- within 48 hours of freezing weather.
- above label rate; use 2% solution (20L/1,000L) for dormant sprays and 1% solution (10L/1,000L) for summer sprays in high water volumes.
- to trees under moisture stress.
- during temperatures above 25°C.
- to sensitive cultivars, such as Red Delicious, Empire or Mutsu/Crispin.

MONITORING TOOLS

Spring can also be a time to assess your inventory of the monitoring tools that will be used this season, including pheromone traps and weather monitoring equipment.

Degree day models often make use of these tools to accurately predict the life stages of many apple pests, including **codling moth**, **oriental fruit moth** and **oblique banded leafroller**. For example, egg hatch for first generation codling moth occurs around 139 DDC (base 10C) after sustained moth catch. This could be a difference of one or two weeks depending on the temperature from one year to the next.

Springtime in the Orchard: Organic Strategies for Apple Pest Management (Cont'd)

Check out the guidelines for using insect pheromone and visual traps on the [apple module](#) of Ontario cropIPM. There you will find information on appropriate trap type, number to use, placement in the orchard and when to deploy for each pest.

Visit the OMAF website to find a list of [IPM suppliers](#) of pest monitoring equipment. To extend the life of pheromone lures, remember to store them in the fridge or freezer until you are ready to use them.

DORMANT COPPER

The efficacy of copper sprays this time of year to reduce the spread of **fire blight** inoculum from overwintering cankers has often been debated. Its effectiveness really comes down to how it is applied and post-application weather. Copper provides an unfriendly environment over the bark and bud surfaces of the tree, preventing bacteria from getting established or spreading to blossoms through rain splash or insects. Thus, it must be applied as a high volume spray to ensure sufficient coverage.

David Rosenberger from Cornell University recommends that copper sprays should be applied at ¼ to ½" green only since later sprays can result in severe fruit russetting. As well, in order for copper sprays to work effectively, it is recommended they be applied to all of the trees in the block. Untreated trees, even non-susceptible varieties, provide a safe haven for the bacteria and insect vectors can move the bacteria around easily.

Copper sprays applied to green tissue may also provide some protection against **apple scab** when applied before spores are released. Follow a dormant copper spray with an early-season sulphur program for scab and powdery mildew, beginning at green tip, at 7-10 day intervals through primary scab season, especially during wet periods. The use of scab resistant varieties will greatly reduce the need for early-season fungicide use.

ORCHARD SANITATION

One of the most important aspects of a successful organic program (or any IPM program) is eliminating or reducing sources of infestation and disease inoculum from the orchard. If your fall clean-up program missed any of the following, consider them this spring to help lower pest pressures for the upcoming season. Good sanitation practices should include:

- **Remove sources of inoculum, including dead or diseased trees, infected branches, cankers, and rotten or mummified fruit.** This is a primary control strategy for management of summer rots, such as black rot (*Figure 3*), but can also be effective against powdery mildew (*Figure 4*) and fire blight.
- **Remove wood piles, fruit bins, stumps and loose bark** that could provide overwintering sites for insects, such as codling moth. **Shred leaves** with a flail mower to stimulate leaf decomposition. This may also disorientates leaf pieces so they eject ascospores toward the soil, instead of up into the tree canopy, reducing primary scab infection. Rake or blow leaves from under trees into the middle of the row, or off-set the mower to reach them.
- **Prune** to increase air flow and promote faster drying time.



Figure 3. Figure 3. Apple branch infected with black rot (right) acts as inoculum source, causing frog-eye leaf spot on developing foliage (left) the following season.



Figure 4. Dormant apple shoots infected with powdery mildew (Photo: Chris Duyvelshoff, Perennia)

IPM Scout Training Workshops for 2014

Here are the updated IPM scout workshops available for those who will be scouting horticultural crops this year. To register contact: Agricultural Information Contact Centre at 1-877-424-1300

<u>Workshop</u>	Date & Time	Location	Workshop Leader	Materials needed	Follow-up field training
Introduction to IPM	Apr 30 8:30 am to 4:00pm	Boardroom 2 and 3 1 st Floor, 1 Stone Rd., Guelph	Margaret Appleby	Lunch on your own Handouts provided Have to pay for parking	
Tomatoes & Peppers	May 2 8:30 am to 1:00 pm.	Reek Building Room PS003 at Ridgetown Campus.	Janice LeBoeuf	Lunch on your own Handouts provided	
Apples	May 6 9:00 a.m. to 3:00 p.m. Following with orchard visit	Auditorium Simcoe OMAF and MRA Resource Centre	Kristy Grigg- McGuffin	Handouts provided If possible bring copy of Pub #360 & 310 Lunch on your own	
Cole Crops	May 9 10:00 am to 2:00 pm	Large Boardroom Woodstock OMAF Office, Unit 1 - 401 Lakeview Drive, Woodstock	Marion Paibomesai	Handouts provided Lunch on your own	
Tender Fruit	May 9 9:00 am to noon	Vineland Rittenhouse Hall	Wendy McFadden-Smith	Handouts provided. Lunch on your own	
Grapes	May 9 1:00 pm to 3:30pm	Vineland Rittenhouse Hall	Wendy McFadden-Smith	Handouts provided. Lunch on your own	
Lettuce, Celery, Onions, Carrots	May 13 10:00 am to 2:00 pm	Boardroom 3 1 st floor, 1 Stone Rd. W, Guelph	Marion Paibomesai	Handouts provided Lunch on your own Have to pay for parking	
Strawberries and raspberry (blueberry training upon request)	May 14 9:00 am sharp to 3:00 p.m.	Auditorium Simcoe OMAF and MRA Resource Centre	Pam Fisher	Required: OMAFRA Publication #360 <i>Guide to Fruit Production</i> \$20 Lunch on your own.	Spotted winged drosophila ID training provided at workshop
Ginseng Scout Training	May 15 1 pm to 3pm	Simcoe Boardroom	Sean Westerveld Melanie Filotas		
Cucurbit Crops	May 20 9:30 to Noon	Ridgetown Campus, Rudy Brown RDC Room 102	Elaine Roddy	Lunch on your own	
Asparagus	TBA		Elaine Roddy		
Sweet corn, Peas and Beans	May 20 1:00 to 3:30 pm	Ridgetown Campus, Rudy Brown RDC Room 102	Elaine Roddy		
Potatoes	May 30 10:00 a.m. to 3:00 p.m.	Boardroom #3 1 Stone Rd., Guelph	Eugenia Banks	<i>Potato Scouting Manual Provided Recommended:</i> OMAFRA publication #823; <i>Potato Field Guide</i> Lunch on your own Have to pay for parking	Field training dates TBA

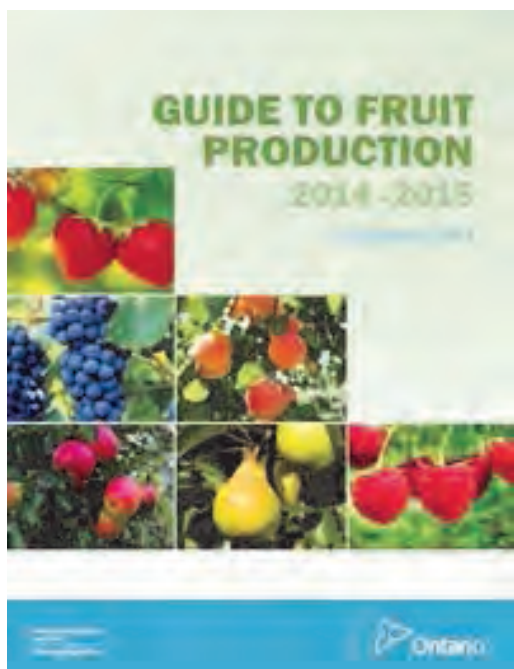
For more information please contact:

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New: Publication 360 Guide to Fruit Production

Publication 360 Guide to Fruit Production

This publication provides recommendations for the commercial production of fruit crops including apples, pears, tender fruit, berries and tree nuts. This publication includes a comprehensive section on thinning tree fruits. Pest management guidelines are presented in a calendar format. Technical information on products is easy to look up in the many tables in this publication. Chapters on resistance management, reduced risk products and biopesticides, and spray application technology have been extensively updated. This publication also provides crop by crop information on fertilizer rates, tables for interpreting soil and tissue analysis and information on micronutrients.



[Downloadable PDF available coming soon](#)

How to order Publication 360, Guide to Fruit Production

Service Ontario #109045, Price \$20.00*

To order copies of this publication:

Visit ServiceOntario Publications website at www.ServiceOntario.ca/publications

Or contact the ServiceOntario Publications Contact Centre at: 1.800.668.9938 or TTY 1.800.268.7095

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 Plan, 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 work plan, 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.

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.

FARMSTART Workshops

1. Essential Tools & Techniques for the Small Scale Vegetable Grower

Date: Saturday, April 26, 10am -12pm

Locations: 10 am-12 pm - Holiday Inn Express Hotel Suites, 10 Nevets Rd, Brampton

Moving at 1:00 pm -3:30pm to the McVean Farm

Cost: \$95.00 (+HST) per person or \$171 (+HST) for two

This workshop will give you in-depth instruction with Jean-Martin Fortier of [Les Jardins de la Grelinette](#), his proven methods and techniques for farming smarter and better. The session will combine indoor presentation with outdoor demonstrations and lots of Q&A time. [*The Market Gardener can be purchased at the FarmStart Store!*](#)□

Topics will include:

- no-till vegetable farming, precision seeders
- how to operate a walk behind BCS tractor and rototiller
- weed control technology
- mulching & use of ground covers
- labor saving tools & devices

To register please visit the website at: <https://farmstart.ticketbud.com/handtools>

2. Weed Management for Small to Mid-Scale Organic Vegetable Production

Date: May 3, 1-5pm

Location: Volunteer Hamilton, 267 King St E, Hamilton, Ontario

Cost: \$55.00/person, \$110.00/farm team

Knowing how to control weeds is one of the most important skills needed for successful organic vegetable production. Organic vegetable farming requires a diverse and very proactive approach to weed control. You can avoid the constant scramble to save crops from weeds by understanding important concepts and techniques in weed control and by having a plan in place before you put the crop in the ground. Join co-owner and manager of [Cedar Down Farm](#) CSA Jeff Boesch for discussion of the terms, concepts and techniques for weed control in organic vegetable farming. Topics that will be covered include:

- stale seed bed preparation,
- cover cropping and crop rotation for weed control,
- a large selection of hand and tractor powered weed management tools,
- timing; weeding schedules in different crops,
- mulching,
- soil conditions and fertility in weed control,
- composting for weed control,
- weed identification,
- and much more....

To register please visit the website at: <https://ticketbud.com/events/7f027d38-9a53-11e3-8922-e7407f42dcbe>

3. Buying A Farm: Planning Ahead for Farm Ownership

Date: Saturday June 7, 1pm - 5pm

Instructor: Tarrah Young

Location: Guelph Chamber of Commerce

Cost: \$65 (+HST) per person or \$110 (+HST) for two

Do you have the dream of buying a farm? If so, the earlier you begin to research and plan for it, the better! How should you begin your search? How do you find financing? How do you make an offer? These questions and lots more will be the focus of this workshop, geared towards first time buyers.

Topics to be covered will include:

- Setting priorities on what to look for in a farm, and where to look
- Financing: the process of getting approved for a mortgage, the role of a mortgage broker and the difference between a residential and agricultural mortgage
- The process of making an offer and learning the lingo (ex: signbacks, amendments, chattels)
- Who you need on your team (ex: mortgage broker, real estate agent, lawyer, home inspector)

This workshop will help demystify the process of purchasing a farm, and help you decide if this is the right choice for you.

Registration: Opens March 2014

Learning Opportunities (Cont'd)

4. The Dirt on Soil

Date: June 21, 2014 12:30 -4:30 pm

Location: Ebenezer Chapel & McVean Farm,
Brampton

Instructor: Ian McCormick

Cost: \$55 (+HST) per person or \$110 (+HST) for two

The root of all life, including human life, is in the soil. In this workshop, learn the basics of soil science in an accessible and hands-on way. Rather than relying on inputs for fertility, get ready for ideas on how to optimize your soil's health, and ultimately the health of your crops, by using the biological community to unleash the tremendous potential in your soil! Come prepared to spend time outdoors with boots, warm clothing and rain gear.

Registration: Opens March 2014

C.R.A.F.T. (Collaborative Regional Alliance for Farmer Training in Ontario) Internship Opportunities

Fulltime Seasonal and Other Organic Farming Internships in Ontario.

If you're ready for a full, hands-on experience that will immerse you in ecological farming then you've come to

the right place. CRAFT Ontario is your gateway to a farming internship experience that will change your life. Whether your dream is to have your own organic farm one day or just want to learn some food growing and hands-on skills that can be applied in other careers and lifestyles, a farming internship is a powerful experience that will equip you with the tools and insights to make a real difference in the world. Each CRAFT farm operates independently and offers its own internship with individualized agreements around such things as living and eating arrangements, stipends, work hours, and training methods.

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

Organic Seed Workshops, 2014 – Presented by Everdale

As part of their work for The Bauta Family Initiative on Canadian Seed Security, Everdale is offering a special series of organic seed production workshops in 2014 across Ontario.

For more information on seed workshops near you, please visit the Everdale website at: <http://everdale.org/workshops/organicseed/>

Conferences, Meetings and Tours

Organic Week, 2014



For more information about Organic Week 2014, please visit the website at www.organicweek.ca.

Links to ON Organic Information & Staff Contacts

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Vacant	Sheep & Goat Specialist	613-258-8299
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Delma Kennedy	Sheep Specialist	519-846-3398
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Tom Hamilton	Beef Cattle Production	705-647-2087
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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:

1-877-424-1300

www.ontario.ca/omafra