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Welcome to ON Organic

Evan Elford, New Crop Development Specialist, OMAF & MRA

The Ecological Farmers Association of Ontario (EFAO) has an exciting line-up of farm tours this year taking place on June 9 and July 28. Also, their ever popular Annual Summer Tour will be taking place from August 22-24 which will visit a number of farms and processors in Eastern Ontario and Quebec. Make sure you register early to secure a place on the tour. More information is listed in the Conferences, Meetings and Tours section of this newsletter or please visit the EFAO website for more information at: www.efao.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 OMAFRA 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 OMAFRA Organic pages are linked from:

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

Beef Cattle Management for Spring/Summer

Brian Pogue, Beef Program Lead, OMAF and MRA

The weather has finally changed and we have said goodbye to winter. For most cow-calf operators, they have either just finished calving or are starting to do so. As is always the case with farming there are decisions and planning that must occur every day. At the end of calving season, it is worthwhile to review and to plan on changes for improvements for next year.

How many calves required some assistance at birth?

How does this compare to other years? The shortage of forage last year may be part of the reason if poor quality hay had to be fed and cows were in poor shape at calving. Calf vigour at birth can also be affected by poor nutrition. Most likely most of the assists occurred with heifers. So were the heifers developed well enough to be mature enough at the time of calving? At the other end of the spectrum, overly conditioned heifers will often experience problems with calving. Perhaps you should select a bull designed for easy calving to breed with heifers this summer, placing emphasises on EPDs for calving ease and low birth weight. Better yet, use an AI bull with proven calving ease.

Herd Health

Be sure to visit with your veterinarian about your herd health program. Vaccinations can assist in preventing scours. Vaccinating cows with a live 4+ way vaccine prior to breeding should be considered. I hear from many early spring calving producers who exclaim the benefits of diatomaceous earth – the white powdery form. It is amazing to see day old calves sample some of this product, which is always evident with the white around their mouths. Producers tell me it helps in dealing with scours and is beneficial to the overall health of the calves.



Figure 1: Beef Cattle

Conditions

If you lost calves because of the cold or saw calves struggle with the mud of the early spring, there could be several solutions.

- 1) Consider calving on grass in the late spring or even in the fall
- 2) Use more bedding
- 3) Provide additional shelter which could be in the form of windbreak fencing, a dry location for calving, a calf hut or an area fenced off that cows cannot access

Evaluating cows

Calving is a great time to make note of cows that should be culled - those with big teats that require you to assist the calf when nursing for the first few days; those who are overly protective with their calf; or who have very bad feet. My recommendations for these cows are to place them in a separate field and do not expose them to a bull. They will be open when you do preg-checks and there will be no good reason to keep them.

Calf Management

- Tagging - Many producers tag calves with the same number as their mothers, so that it is very easy to match calves with moms to evaluate the productivity of the cows.
- Castration – a rubber band around BOTH testicles at birth can be very effective
- Dehorning at an early age with paste can be effective and minimize any pain. Using homozygous polled bulls is the easiest and pain free.

Record Keeping

I strongly encourage cow-calf producers to keep records and to consider participating with Beef Improvement Opportunities (BIO), buy a software package or at the very least keep records in excel. Recording calving dates is critical to determine a cow's calving interval which needs to be close to 365 days. Taking weaning weights and combining this with calving interval is the best way to assess the annual productivity of a cow.

Summer Management

- 1) Rotate pastures – this is the easiest method to manage pastures as well as maximize the production per acre of grass and beef
- 2) Provide optimal mineral and salt
- 3) Monitor the cows for signs of heat and repeating
- 4) Provide sufficient shade for the cattle to keep them comfortable
- 5) Ensure there is sufficient water
- 6) Consider a separate area for the calves – a calf hut or a fence which will stop cows but not the calves

Beef Cattle Management for Spring/Summer (Cont'd)

- 7) Manage flies with a scratcher/oiler and/or diatomaceous earth
- 8) Monitor health for such things as:
 - a) Lameness – footrot, cracks, crossed toes or injury will all hurt productivity. It is critical to watch bulls during breeding season for any lameness
 - b) Pinkeye which is more likely to occur when there is long dry grass
 - c) Summer pneumonia

Raspberry Bushy Dwarf Virus in Raspberries?

Pam Fisher, Berry Crop Specialist, OMAF and MRA

Do your raspberry plants turn yellow in spring? **Do you see apparent symptoms of herbicide injury on emerging primocanes?** Is fruit crumbly? These may be symptoms of raspberry bushy dwarf virus, a pollen-borne virus that affects red and black raspberries and occurs naturally in wild raspberries.

Raspberry bushy dwarf virus (RBDV) can cause a variety of symptoms, and may cause no symptoms in some cultivars. One common symptom is yellow, interveinal chlorosis on emerging primocanes in the spring (*Figure 1 and Figure 2*). This virus can also cause crumbly fruit, and a reduction in vigour. Leaves may exhibit yellow blotches, rings and lines.

The best way to diagnose raspberry bushy dwarf virus is early in the season, when temperatures are fairly cool and symptoms are most evident. Collect a few young but fully expanded leaves with symptoms and send to a diagnostic laboratory. ELISA test kits have been developed to diagnose this virus and most diagnostic labs will provide this service.

Raspberry bushy dwarf virus is a big problem because it is spread to new plants in pollen from infected raspberry plants. Some varieties are more tolerant than others, and some plant breeders have developed varieties with resistance to this disease. Primocane fruiting varieties are prone to RBDV because of their long bloom period.

Management of RBDV includes the following steps:

- Purchase virus-tested plants from an accredited nursery.
- Control wild raspberries around the field and farm.
- Rogue out infested plants.

Remove bloom in the establishment year of a raspberry planting.

(Author's P.S.: Tomato ringspot virus is another common virus in Ontario raspberries, and the one I see most often. Tomato ringspot virus is spread by the dagger nematode. Symptoms include crumbly fruit, and a reduction in plant vigour. This virus can also be diagnosed using the ELISA test.)



Figure 1: Symptoms of raspberry bushy dwarf virus in primocane fruiting raspberries. Note the difference in Varieties.



Figure 2: Symptoms of raspberry bushy dwarf virus on plant foliage, sometimes described as a "calico" pattern.

Biology: Spotted Wing Drosophila in Ontario

Lisa Emiljanowicz and Geraldine Ryan, School of Environmental Sciences, University of Guelph, and Pam Fisher, Berry Crop Specialist, OMAF and MRA

Introduction

Spotted wing drosophila (SWD) is an invasive vinegar fly native to southeast Asia. It is a pest of soft-skinned fruit. SWD females are able to lay eggs in undamaged fruit before harvest due to a large, serrated ovipositor that is not normally present on other common vinegar fly species. Therefore, larvae may be present in fruit at harvest, reducing fruit quality and yields. Additionally, the oviposition wound acts as a pathway to secondary infection by other insects and pathogens causing rapid deterioration of the fruit. SWD are of concern as they have recently invaded the U.S., Canada, and Europe, causing fruit damage and revenue loss.

Life Cycle

Since SWD has only recently been found in Ontario, our knowledge of their biology is based on information from southeast Asia and western North America, where they have been established for a longer period of time. Research is underway to gather information more specific to SWD in Ontario. However, it is known that SWD have a life cycle containing an egg stage, 3 larval instars, a pupal, and an adult stage. Eggs, larvae, and pupae are present inside the fruit. Full development from egg to adult can take between 8 and 25 days depending on temperature. (Figure 1)

The adult lifespan can vary between 3 and 9 weeks, although overwintering adults that emerge in late autumn can survive until the following spring by seeking refuge under leaves,

that SWD will be able to complete 3 to 9 generations in the Canadian growing season.

Crops Affected and Wild Hosts

SWD has a wide host range but is primarily a pest of soft-skinned berries and stone fruits. They can infest cultivated crops and wild hosts that may border crops. If perimeter hosts are left unmaintained populations may increase as SWD adults move from host to host with different ripening times. Late season crops are at a higher risk of infestation because populations peak after late July, however early crops can also be affected. Crops of concern include: strawberries, blackberries, blueberries, cherries, raspberries, elderberries, mulberries, nectarines, peaches, pears, and plums, and possibly grapes. Wild hosts include: buckthorn, dogwood, brambles, nightshade, honey-suckle, black elder, pokeweed, and pin cherry. SWD have been found to feed on oak tree sap, and oviposit on cracked or damaged tomatoes, and even flowers, in the absence of ideal hosts. This is an indication of their opportunistic behaviour.

Observations in Ontario

The first detection in Ontario was in November 2010. In 2011, SWD adults were not trapped until the middle of August, and numbers did not increase until late September. No commercial damage was reported.

In 2012, the first SWD were trapped on June 25th. Larvae were detected in fruit as early as July 6 and widespread damage was evident in mid-late August. The winter of 2011-2012 was very mild and spring 2012 was very early. We expect that these mild conditions contributed to the earlier build-up of SWD in Ontario.

Studies on SWD in their native range of Japan suggest that this species can survive and overwinter in below-freezing conditions. It is important to monitor the activity of adult SWD each year to determine when the pest is active. The risk to early-developing fruit crops, particularly early varieties, could vary from year to year, depending on overwintering conditions. All growers should be prepared to manage for SWD in 2013.

For more information on monitoring for SWD adults and larvae see:

www.Ontario.ca/spottedwing

Identification of spotted wing drosophila [http://](http://www.omafra.gov.on.ca/english/crops/facts/swd-identify.htm)

www.omafra.gov.on.ca/english/crops/facts/swd-identify.htm

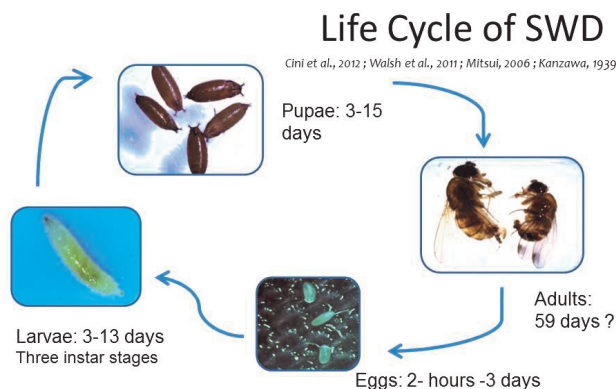
Monitoring for spotted wing drosophila in Ontario [http://](http://www.omafra.gov.on.ca/english/crops/facts/swd-monitor.htm)

www.omafra.gov.on.ca/english/crops/facts/swd-monitor.htm

Links to information from other sources:

Penn State Extension: Spotted Wing Drosophila Part 2:

natural history <http://pubs.cas.psu.edu/FreePubs/PDFs/xj0046.pdf>



One generation: 8-10 days at 25 C, 21-25 days at 15 C

Figure 1: Life cycle of spotted wing drosophila

between stones, or in man-made enclosures. Most SWD move to sheltered locations outside of crop fields to overwinter. Overwintering SWD enter a state of reproductive diapause and are then able to lay eggs the following spring. Females reach sexual maturity 1 to 2 days after emerging, with the ability to produce anywhere from 380 to 560 eggs in a lifetime. Populations peak in late summer and early fall. The preferred temperature for SWD is between 20 and 25 °C, and their activity is reduced when temperatures exceed 30 °C or fall below 10 °C. Given this information, it is predicted

OMAF and MRA Organic Field Crop Budgets

The following Organic Field Crop Budgets (Publication 60) are available in a printable version on the OMAF website at the following links:

[2013 Organic Barley and Oats](#)
[2013 Organic Grain Corn and Soybeans](#)
[2013 Organic Winter Wheat and Spelt](#)

The full PDF version of the 2013 Field Crop Budgets (Publication 60) containing budgets for both organic and conventional crops is available on the OMAF website at: <http://www.omafra.gov.on.ca/english/busdev/facts/pub60.pdf>

Funding Opportunities

Growing Forward 2 - Helping You Reach Your Goals

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

With a focus on innovation, competitiveness, and market development, Growing Forward 2 programs are designed to help the industry capitalize on opportunities and contribute to the economy. Whether you are just starting out, or have been in business a long time, Growing Forward 2 will offer practical and flexible programs that can help you reach your goals.

Growing Forward 2 Client Information Sessions

Sign-up for a Growing Forward 2 client information session hosted by our delivery partners in collaboration with OMAF.

For a list of session locations, dates and times and to register click here: [GF2 Client Information Sessions](#)

GF2 Client Portal - New Approach

Farm businesses, processors and groups can enrol for upcoming Growing Forward 2 programming through the [GF2 Client Portal](#). You only need to register once to get access to the full menu of programs and track submitted applications.

To receive regular Growing Forward 2 updates send us an email at growingforward2@ontario.ca. For information on Growing Forward 2 Business Risk Management Programs visit [Agricorp](#).

Apply For Growing Forward 2 - Start Here

1. Create Your Profile

New users need to register a user name and password to begin the application process.

2. Apply

Login to apply for Growing Forward 2 programs including education and funding.

OMAF and MRA Funding Programs and Support for the Food Industry

OMAF and MRA's Business Development Branch has pulled together relevant funding programs for the food industry and compiled them all in one place. Please visit the [OMAF and MRA Funding Programs and Support](#) webpage for more information on relevant programs and services.

Export Market Access: A Global Expansion Program What is it?

Export Market Access (EMA) is a \$5 million initiative, jointly sponsored by the Government of Ontario and the Ontario Chamber of Commerce (OCC). It is designed to help small and medium-sized enterprises (SMEs) increase their access to global markets.

What is the benefit to your company?

Generally the EMA program will cover 50% of the eligible costs in four specified areas. Non-repayable contributions generally range from a minimum of \$5,000 to a maximum of \$30,000 (with the exception of capital bidding projects which generally would not exceed \$35,000).

Who Qualifies?

- SMEs in Ontario currently offering a product or service
- A new or emerging exporter - minimum of five employees to a maximum of 500 employees - or partnerships/consortium of small to medium sized new or emerging exporters meeting the following criteria:
 - Annual sales of \$500,000 or more.
 - Currently established and operating in Ontario.
 - Registered (federally or provincially) for minimum of two years.
- In full compliance with all government laws and regulations.

Funding Opportunities (Cont'd)

- Not receiving any other contributions from public funds towards the activities contained in the funding application.

How do I apply?

All of the forms required to submit an application can be accessed, completed and submitted online at <http://exportaccess.ca/howtoapply.shtml>.

You can apply for more than one category and you can apply more than once in a 12-month period.

You will be advised within 30 business days regarding your eligibility for EMA and will receive 25% of the projected eligible costs when you sign your contract.

When you have completed the activities/ project you will submit a final report along with other required documents.

Upon approval and acceptance of the final report, the OCC will provide you with the balance of their contribution.

Where can I find more information?

General information can be found on the OMAFRA website: <http://www.omafra.gov.on.ca/english/food/industry/exp-mkt-access.htm>

More detailed information, a guide and application forms can be found at the Export Access website: www.exportaccess.ca

Learning Opportunities

IPM Scout Training Workshops for 2013:

Here are the updated IPM scout workshops still available for those who will be scouting horticultural crops this year.

To register contact: Agricultural Information Contact Centre at 1.877.424.1300.

For more information contact: Margaret Appleby, OMAF and MRA IPM Systems Specialist Tel: 613.475.5850 or Email: margaret.appleby@ontario.ca

Workshop	Date & Time	Location	Workshop Leader	Materials needed	Follow-up field training
Potatoes	Fri., May 31 10:00 a.m. to 3:00 p.m.	Room TBA OMAF and MRA 1 Stone Rd., Guelph	Eugenia Banks	<i>Potato Scouting Manual Provided</i> <i>Recommended:</i> OMAFRA publication #823; <i>Potato Field Guide</i> Lunch on your own <i>Have to pay for parking</i>	Field training dates TBA

Learning Opportunities (Cont'd)

Certificate in Sustainable Agriculture

Date: July 8-11, 2013

Location: Delta Hotel, 50 Stone Road West, Guelph.

This four-day certificate course includes comprehensive presentations, hands-on exercises and your own set of take-home guidebooks. It also includes a human health workshop which is both entertaining and informative with each participant receiving a comprehensive "report card" on his or her own personal health.

The course teaches:

- 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

About the presenter:

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".

Tuition for the full 4-day course is \$860 + HST and includes daily continental breakfast, lunch, and one evening dinner as well as all course materials and Certificate testing. The class will run from 8am - 5:00pm each day.

For more information: Tel 855.247.6548 or Email marketing@agricultureolutions.ca.

Permit to Take Water (PTTW) Workshops

The OF&VGA will be hosting PTTW workshops in the OMAF and MRA Simcoe auditorium in 2013 and 2014. The format will be a half day session from 9am-12pm working through the application form in a group setting.

To register please contact: George Shearer, Tel: 519.763.6160 ex. 219

Registration fee: \$20.

2013 Dates: October 25 and November 29

2014 Dates: January 31 and March 28

International Maple Syrup Grading School

Date: July 9-10, 2013

Location: Cornwall, Ontario

For more information and registration please visit: <http://umaine.edu/maple-grading-school/>

Conferences, Meetings and Tours

Ontario Maple Syrup Producers Summer Tour

Date: July 11-13, 2013

Location: Cornwall, Ontario

For more information please visit: http://www.ontariomaple.com/pages/summer_tour/

EFAO Summer Kitchen Table Meeting

Draft Horses – the Perfect and Profitable Fit with the CSA Garden

Date: July 17, 2013, 10am-4pm

Location: Orchard Hill Farm, St. Thomas

Demonstrations of mostly new and interesting horse machinery such as Pioneer plough, culti-mulcher, row cultivation in the CSA garden, treadmill, hay mower and tedder, etc.

Hitching demonstrations from 1-4 horses for different jobs will also be covered.

For more information and to register please contact EFAO: outreach@efao.ca

EFAO Summer Farm Tours

Laepple Organic Farm Tour

Date: June 9, 2013 1:00pm - 4:00pm

Join Fritz and Linda Laepple on their 187 ac. farm to see their grass fed cow/calf operation, grass fed broilers in a movable shelter, 10 ac of potatoes, hay, mixed grain, a solar hot water system and brick bake oven. Share in their knowledge and experience as organic farmers on two continents. The tour will provide an overview of how many different aspects on a diversified farm interact and benefit from one another.

Conferences, Meetings and Tours (Cont'd)

Whitefield Farm Tour

Date: July 28, 3:00pm - 5:00pm tour, followed by a potluck
Owned by Blair and Jessica Morrison, Whitefield Farm is a new 80 ac mixed farm located in Lucknow, Ont., featuring organically raised CSA garden, pastured beef, chicken and eggs.

A new straw bale house built in 2012 features reclaimed and recycled materials, passive solar heating, imported wood cook stove, solar and horse power energy. Whitefield Farm is being developed with sustainability and self-sufficiency in mind and focused on creative solutions to the challenges of modern farming.

For more information on either tour and to register contact: info@efao.ca,
Tel: 519.822.8606 or 1.877.822.8606.

2013 EFAO Bus Tour to Eastern Ontario & Quebec!

Date: August 22 – August 24

Visit 8-10 farms, a mixture of vegetables, dairy, cash crops, and on-farm processing.

Overnight stays in Ottawa & Cornwall

Highlights:

- Anaerobic digester
- Sunflower milling
- Cover crop research
- Organic dairy research
- On-farm dairy processing
- And more!

To register for the bus tour contact: info@efao.ca, Tel: 519.822.8606 or 1.877.822.8606 to hold your spot now!

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