



Happy New Year! Welcome to the first edition of Hort Snacks newsletter for 2017, the 9th year of the newsletter.

With the start of the new year, there always seems to be an underlying sense of permission to try new things or embark on new pathways. It's a neat opportunity that we can all benefit from. In that spirit, this is something that is going to happen for this newsletter in the near future, if only in electronic delivery method. Content and look of the newsletter will remain virtually unchanged.

In this edition, you'll find it bursting at the seams with announcements for upcoming extension courses and events. The choices are varied, both in terms of geographic location (whether in Alberta, or across North America) and in terms of topics. In many cases, you don't even have to leave your home; you can just log on to the computer and attend a webinar. Hopefully you'll find one or two to suit your needs.

Otherwise, there are a few other articles and tidbits that might be of interest or use to you, whether it be information on diseases or insects or other topics. Regardless, have a great month and stay warm.

Rob Spencer / Dustin Morton, Commercial Horticulture Specialists
 Alberta Ag-Info Centre, Alberta Agriculture and Forestry
 310-FARM (3276)

FEATURED WEBSITE

Alberta Climate Information Service (ACIS)
 Maps, weather stations, data reports, and MORE!

<http://agriculture.alberta.ca/acis/>

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THINGS TO DO / THINGS TO THINK ABOUT THIS MONTH

- Register for relevant winter workshops
- Consider specific training courses for both yourself AND staff (e.g. First Aid, Advertising, Electronic bookkeeping, Record keeping, etc.) – Book it
- Are all of your licenses or certificates up to date?
- Review your insurance coverage. Do you have sufficient for your activities? Are all the things that happen on your farm covered? Has anything changed?
- Review your project to-do / wish list from the end of last season – What are some of the things that you identified?
- Start thinking about and planning your field layouts for the coming season. Does your current set up work for any new crops? Do you have sufficient space for everything you have planned (headlands, activities, parking, etc.)? Consider field orientation, irrigation systems, shelterbelts and traffic movement (foot, equipment, vehicles, etc.).
- Have you ordered the plant material that you will need for the next season? Planning and ordering in advance can save a lot of headaches in the spring.
- Are you ordering transplants? Growing your own? Cleaning up the greenhouse might also be in order.
- Update / tidy up / repaint sales sheds and signs

NEWSLETTER USE RESTRICTIONS

Please feel free to share all or portions of this newsletter with other interested parties.

If you want to use content from this newsletter in other media, please request permission before doing so.

MENTAL SNACKTIME - Optimism

"Optimism is the faith that leads to achievement. Nothing can be done without hope and confidence." – Helen Keller

"Human spirit is the ability to face the uncertainty of the future with curiosity and optimism. It is the belief that problems can be solved, differences resolved. It is a type of confidence. And it is fragile. It can be blackened by fear and superstition." – Bernard Beckett

"Pessimism leads to weakness, optimism to power."
– William James

"Perpetual optimism is a force multiplier." – Colin Powell

"The essence of optimism is that it takes no account of the present, but it is a source of inspiration, of vitality and hope where others have resigned; it enables a man to hold his head high, to claim the future for himself and not to abandon it to his enemy."
– Dietrich Bonhoeffer

"Optimism is the foundation of courage." – Nicholas M. Butler

In the News / Articles Worth Looking At

- [Positive changes to Temporary Foreign Worker Program](#) – Greenhouse Canada article
- [MSU Study Proves Light-Blocking Packaging Technology a Major Win for Potato Shelf-Life](#) – Spud Smart article
- [MIT Wants to Turn Everyone Into a Farmer With Its Food Computers](#) – Motherboard article
- [How fertiliser helped feed the world](#) – BBC News article
- [New Study Shows Neonicotinoids Pose Little Practical Risk To Bees](#) – Growing Produce article (Aug 2016)
- [Pricing Tricks Proven By Research](#) – Greenhouse Grower article
- [5 Things You Need To Know About Young Plant Consumers \[10% Project\]](#) – Greenhouse Grower article
- [Light Matters In Greenhouse Structures](#) – Greenhouse Grower article



Q: It's a new year! What are you planning that is going to make this one different than previous ones?

A: More rest. More yoga and stretching. More water and meditation. Get back to climbing.

A: As we have more time, better spring pruning!

A: We are faced with steep increases in costs so we are looking at making systems better and evaluation many processes

A: I have been reading "Good to Great" and "The E Myth Revisited" and reviewing my business accordingly. I hope to implement much of what these books teach about business and how to approach what we do.

A: Have more fun. Laugh more. Celebrate the small victories and the big ones will follow.

Next Month's ? → [What criteria do you use when selecting new equipment?](#)

Upcoming Conferences / Workshops

January 2017

- **Potato Expo 2017**
Jan 2-6, 2017 – Moscone Center West Marriot Marquis – San Francisco, California, USA
www.potato-expo.com
- **Closing the Gap – Creating a More Profitable Business**
Jan 11, 2017 – Airdrie Ag Centre – Airdrie, AB
- **Hort Snacks-to-Go Webinar – Carrot IPM**
Jan 16, 2017 – [Registration link](#)
- **Agronomy Update 2017**
Jan 17-18, 2017 – Lethbridge Lodge – Lethbridge, AB
Ropin' the Web (www.agriculture.alberta.ca) – Coming Events
- **Getting into On-Far Retail – Explore Local Bus Tour**
Jan 18, 2017 – Southern Alberta
Register by Jan 11, 2017 – 1-800-387-6030
- **Greenhouse Workshop – Aeroponics, Lighting, etc.**
Jan 18, 2017 – Agriculture Building – Lacombe, AB
- **Scotia Horticultural Congress 2017 – “Building Blocks for Tomorrow’s Farms”**
Jan 23-24, 2017 – Old Orchard Inn Convention Centre – Greenwich, NS - <http://www.horticulturens.ca/index.php/events/scotia-horticultural-congress/>
- **Digital Marketing 101 Seminar – by Alberta Food Processors Association**
Jan 25, 2017 – Agriculture Business Centre – Leduc, AB
www.afpa.ca
- **Manitoba Potato Production Days**
Jan 24-26, 2017 – Keystone Centre – Brandon, MB
www.mbpotatodays.ca
- **48th Annual Northwest Agricultural Show**
Jan 24-26, 2017 – Portland Expo Centre – Portland, Oregon, USA
www.nwagshow.com
- **19th Annual Pacific Agricultural Show**
Jan 26-28, 2017 – Tradex Exhibition Centre – Abbotsford, BC
www.agricultureshow.net
- **Pricing Principles Workshop**
Jan 24, 2017 – Agri-Food Business Centre - [Leduc, AB](#)
Jan 26, 2017 – Airdrie Ag Centre – [Airdrie, AB](#)
Jan 31, 2017 – TBD – [Grande Prairie, AB](#)
- **36th Annual Guelph Organic Conference & Expo**
Jan 26-29, 2017 – Guelph University Centre, Guelph, ON
www.guelphorganicconf.ca
- **Hort Snacks-to-Go Webinar – Drip Irrigation**
Jan 30, 2017 – [Registration link](#)
- **FarmTech 2017**
Jan 31 – Feb 2, 2017 – Edmonton Expo Centre at Northlands – Edmonton, AB
www.farmtechconference.com
- **Human Resource (HR) Essentials**
Jan 31, 2017 – Airdrie, AB

February 2017

- **Human Resource (HR) Essentials**
Feb 1, 2017 – Stony Plain, AB

Upcoming Conferences / Workshops

February 2017 continued

- **32nd Annual North American Farm Direct Marketing Association (NAFDMA) Convention**
Feb 3-9, 2017 – Mystic, Connecticut, USA
<http://www.farmersinspired.com/Convention/>
- **Getting Into Farmers Markets**
Feb 8, 2017 – Keephills Community Hall – Parkland County, AB
Feb 9, 2017 – Airdrie, AB
- **Explore Local Webinar – Marketing Your Story**
Feb 15, 2017
- **Adding it Up: Getting a Handle on Your Greenhouse Financials**
Feb 15-16, 2017 – Lacombe Agriculture Building - Lacombe, AB
Call 1-800-387-6030 to register
- **Organic Alberta Conference**
Feb 17-18, 2017 – Lacombe, AB
- **Ontario Berry Growers Association Annual Meeting**
Feb 20, 2017 – Niagara Falls, ON
www.ontarioberries.com
- **Ontario Fruit & Vegetable Convention**
Feb 21-22, 2017 – Scotiabank Convention Centre – Niagara Falls, ON
www.ofvc.ca
- **Hort Snacks-to-Go Webinar – Hydroponic Lettuce**
Feb 27, 2017 – [Registration link](#)
- **Agritourism and Farm Direct Marketing Workshop**
Feb 28, 2017 – Agriculture Centre – Lethbridge, AB
Register – 1-800-387-6030

March 2017

- **Strawberry Production for New Growers**
Mar 1, 2017 – Pomeroy Olds – Olds, AB
Call 1-800-387-6030 to register
- **Alberta Farm Fresh School – From Farm to Market**
Mar 2-3, 2017 – Pomeroy Olds – Olds, AB
www.albertafarmfresh.com
- **Potato Post-Harvest Management for Fresh/Seed Potatoes**
Mar 7, 8, 9, 2017 – Coast Lethbridge / Lacombe Memorial Centre / Hazel Bluff Community Hall (Westlock)
Call 1-800-387-6030 to register
- **Adding it Up: Getting a Handle on Your Greenhouse Financials**
Mar 8-9, 2017 – Red Hat Co-op - Redcliff, AB
Call 1-800-387-6030 to register
- **Problem Pests of Horticulture Crops**
Mar 14, 15, 16, 2017 – Airdrie Ag Centre / Lacombe Memorial Centre / Strathcona Community Centre – Sherwood Park, AB
Call 1-800-387-6030 to register
- **2017 Manitoba Direct Farm Marketing Conference**
Mar 10-11, 2017 – Access Event Centre – Morden, MB
www.directfarmmarketing.com
- **2017 Canadian Horticultural Council (CHC) Annual Meeting – “Sustainability = Balance”**
Mar 14-16, 2017 – Fairmont Winnipeg – Winnipeg, MB
www.hortcouncil.ca/
- **Canada Blooms 2017**
Mar 10-19, 2017 – Enercare Centre – Toronto, ON
www.canadablooms.com
- **Hort Snacks-to-Go Webinar – Biocontrol Update**
Mar 20, 2017 – [Registration link](#)

Greenhouse Workshop

Wednesday, January 18, 2017

9:45 a.m. to 2:45 p.m.

Agriculture Building

5030 50 Street, Lacombe, Alberta

Aeroponic Lettuce Production

Nabeel Mohammed, Greenhouse Irrigation and Nutrient Program Lead,
Agriculture and Forestry

Winter crop lighting and its application

Saeid Mobini, Greenhouse Research Scientist, Agriculture and Forestry

Greenhouse Hygiene

David Bird, Crop Production Services

Lighting Product Demonstration

Christine Stein, P.L. Light Sources

Registration is free, call:

1-800-387-6030

For more information contact:

Nabeel Mohammed: 403-362-1313

Saeid Mobini: 403-362-1322



invites you to:

Getting Into On-Farm Retail Bus Tour

This one-day bus tour examines selling your food products direct to consumers from your farm. Join us to discover on-farm retail options from the simple to the diversified.

On-farm Retail Tour Stops

Chinook Honey Company and Chinook Arch Meadery, Okotoks

Cherie and Art Andrews operate a small family run apiary, seasonal Country Store and meadery.

<http://chinookhoney.com/>

Lambtastic Farms, Vulcan

Professional chefs Ray and Nancy Nolan sell their farm raised lamb from the farm as well as at Vulcan First Street Foods, Spud.ca and selected restaurant menus. Check them out on Facebook.

Meadow Creek Sausage and Meat, Claresholm

The Meadow Creek Market and Grill, operated by butcher Peter and Sylvia Blokpoel and their marketing whiz daughter, Chantal offers fresh and frozen sausages and meat cuts produced in their federally inspected facility.

<http://meadowcreeksausage.com/>

The Saskatoon Farm, De Winton

Paul and Karen Hamer offer a u-pick, farm market, garden centre and gift store, on-site café and seasonal ice cream patio.

<http://www.saskatoonfarm.com/>

Registration and Information

Date: Wednesday, January 18, 2017

Registration deadline: January 11, 2017

Location: Meet at Petro-Pass and hop on our bus
Junction of Hwy 547 and Hwy 2, near Aldersyde

Time: 8:30 a.m. – 5:15 p.m.

Cost: \$25 includes GST
Lunch and refreshments provided
Payment options: Visa, MC or cheque

**To register call:
1-800-387-6030**

For More Information:

Delores Serafin
Alberta Agriculture and Forestry
780-427-4611
delores.serafin@gov.ab.ca

AFFPA / AFMA presents ... "From Farm to Market" – Tentative Agenda



Thursday, March 2, 2017 – Day 1				BUSINESS / CONVERSATION ROOM	TRADESHOW	NEW VENTURE CONSULTATIONS
Ballroom A	Ballroom B	Ballroom C	Pool Room			
8:00 – 8:30 am REGISTRATION						
8:30 – 9:00 am Welcome & Opening Remarks – acknowledgement of sponsors / Intro by Olds College						
9:05 – 10 am PLENARY – Flying Your Flag – Showcasing Your Unique Self						
10 – 10:30 am – COFFEE BREAK & TRADE SHOW						
10:30 – 11:55 am						
Predator Management – Fruit/Veg – birds, big vertebrates and rodents (3 parts)	Small Farm Tools Panel	Panel – Marketing Direct to Chefs & Restaurants	Planning Special Events at Farmers' Markets Panel	DIY Spotted Wing Drosophila – Monitoring/Mgmt		
12 noon – 12:30 pm – LUNCH		12:30 – 1:30 pm – Annual General Meetings (AFFPA / AFMA)				
1:30 – 2:25 pm						
Problem pests of strawberries & how to manage them (Anthracnose & TPB)	Customer Service & Relations	High Tunnels	The Benefits of Bees on Your Farm	Farmer Pesticide Course (class)		
2:30 – 3:25 pm						
Simple Shoulder Season Technologies – Cold Climate Extension	Hot and Spicy (Garlic Production)	Labelling - Nutritional	Disaster Recovery Panel	Meeting Customer Requirements discussion		
3:30 – 4:00 pm – COFFEE BREAK & TRADE SHOW						
4:00 – 4:55 pm						
Beyond the Traditional: Alternative Farming Techniques	Beyond the Farmers Market – selling direct to retail	Farmers Market Booth Merchandizing	Strawberry Varieties	Farmer Pesticide Course (exam)		
5:00 – 5:30 pm	Networking & Trade Show					

5:30 – 7:30 PM – Dinner & Awards (Cash Bar Available)

7:30+ PM – Informal Mixer / Social – Olds College

AFFPA / AFMA presents ... "From Farm to Market" – Tentative Agenda



Friday, March 3, 2017 – Day 2				BUSINESS / CONVERSATION ROOM	TRADESHOW	NEW VENTURE CONSULTATIONS
Ballroom A	Ballroom B	Ballroom C	Pool Room			
8:00 – 8:30 am REGISTRATION						
8:30 – 9:25 am PLENARY – Brand Your Genius						
9:30 – 10:25 am						
Soil Fertility – testing	Branding & Promotion Using Traditional Media (print)	Predator Control for Livestock	Farmers' Market Managers Meet Up / Networking			
10:30 – 11 am – COFFEE BREAK & TRADE SHOW						
11 am – 12:25 pm						
Packaging Panel (soft, hard, compostable)	The Theory Behind Good Web Design & Marketing	Beyond Bologna: Meat Trends & Meat Lab TOUR (OFF-SITE)	DIY Spotted Wing Drosophila – Monitoring/Mgmt			
		Grapes for the Prairies				
12:30 – 1:30 pm – LUNCH & TRADE SHOW						
1:30 – 2:25 pm						
Water for Horticulture Crops – how much & when?	Best Practices in Market Management Panel	Pasture Protein	Demanding More From Your Seed Companies			
2:30 – 3:25 pm						
Field-scale Biologicals / Biorationals	Social Media Marketing	Alberta Farm Animal Care	Holistic Farm Design			
3:30 – 4 pm – COFFEE BREAK & TRADE SHOW						
4 – 4:55 pm PLENARY – Creating Smart Meaningful Marketing that Resonates with Your Customers						

5:00 PM – Conference ends



HortSnacks-to-Go: 2016/2017 Webinar Series



To register call **Dustin Morton**
at 780-679-1314 or email at
dustin.morton@gov.ab.ca

October 17 (3 PM MST) –

Barb Stefanyshyn-Cote, Black Fox Farm & Distillery

Barb and her family operate Black Fox Farm and Distillery, a cut flower farm and distillery located just outside Saskatoon, SK. Barb discusses how they got started, the trials and tribulations of cut flowers, and what they've learned along the way.

November 21 (3 PM MST) –

Amanda Thomsen, Kiss My Aster

Amanda is the thrift shopping, Ryan Gosling loving punk behind the gardening blog 'Kiss My Aster'. This renowned author, speaker and garden diva will be discussing ways of making your garden centre Kiss My Aster-proof to ensure your clients come back year after year.

December 12 (3 PM MST) –

Adithya Ramachandran, Kaleidoscope Gardens

Adithya and Jennifer own and operate Kaleidoscope Gardens near Dundurn, SK. This small farm has invested heavily into season extension and will be discussing how they've used it to open up their market to new crops and extend the season of traditional crops.

January 16 (3 PM MST) –

Rick Peters, Agriculture and Agri-Food Canada (AAFC)

Rick is a research scientist studying fungal diseases of carrots and other vegetable crops in Prince Edward Island. He will be looking at the ins and out of integrated pest management in carrots from seed to harvest and everything in between.

January 30 (3 PM MST) –

Rebecca Shortt, Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAF)

An expert in irrigation management, Rebecca will discuss irrigation scheduling with drip irrigation and how to get the most bang for your buck from your irrigation system.

February 27 (3 PM MST) –

Bob Purton, Kangro Gardening

Kangro Gardening is a five acre market garden just outside Yorkton, SK. Bob's transition to hydroponic lettuce production was not without challenges and he'll discuss his approach as well as his successes and failures.

March 20 (3 PM MST) –

Suzanne Wainwright-Evans, Buglady Consulting

Suzanne has been working with biological control agents for nearly 20 years and is well known in the greenhouse industry. She'll be discussing some recent trends she's seen in greenhouse pest control as well as perennial issues everybody deals with in their operations.

JANUARY 11 (9 AM MST)

MARKETING MEATS

While beef is one of the top three local food items purchased, there is still a strong un-met consumer demand according to the 2016 reports on local food demand in the Calgary and Edmonton regions. Learn how established farm direct meat marketers incorporate marketing best practices into of their meat business.

FEBRUARY 15 (9 AM MST)

MARKETING YOUR STORY: LEPP FAMILY FARM

Charlotte Lepp from Lepp Farm Market in Abbotsford, BC will share how she has incorporated their farm story into all aspects of their very successful farm retail operation. Discover how creating a brand around your unique story can help you connect with customers and build loyalty and trust in your business.

MARCH 8 (9 AM MST)

HUMAN RESOURCE (HR) ESSENTIALS

Are you struggling to hire the right people? Would you like to learn effective strategies to boost employee performance and retention? This one-day workshop offers a practical, hands-on approach to your most challenging HR management issues. Denise Burrell of the Performance Group Inc. has delivered numerous HR training programs. Denise is known for her ability to draw on workshop participants' experiences to make material relevant and meaningful.

APRIL 12 (9 AM MDT)

ALBERTA HEALTH SERVICES FOOD REGULATION

Learn the ins and outs of the Food Regulation as it applies to food sold at Alberta approved farmers' market. A public health inspector with Alberta Health Services will share the requirements you need to meet in order to legally sell your food products.



Webinar Series 2016-17

www.explorelocal.ca

Webinars are 60 minutes in length and include Q&A time.

*When registering, change time zone to Denver; there is not a choice for Alberta.

Register for any of these webinars by clicking on the following link:

<https://albertaagriculture.webex.com/albertaagriculture/onstage/q.php?PRID=bec5c756363aa2eaa53031dec47b65b>

PREVIOUS WEBINARS can be viewed on the Explore Local website under subject areas.

For more information contact:

Cindy Cuthbert,
Alberta Agriculture and Forestry
Email: cindy.cuthbert@gov.ab.ca
Phone: 780-538-5287 (for toll-free calling in AB, dial 310-0000, then the number)



2016-17 Coming Events At-A-Glance

www.explorelocal.ca/events

The following table shows Explore Local upcoming events in date order. For more information about the event and for registration information, visit the Explore Local website and click on the Events tab.

Event Name	Date	Event Type	Location
Being the Best: Lessons in Marketing NAFDMA BC 2016	WED OCT 12 9 AM MDT	Webinar	N/A
Getting Into Farming	TUES OCT 18	Workshop	Airdrie
Explore Local Food Markets	WED NOV 9 9 AM MDT	Webinar	N/A
Get It Off the Shelf: Putting Your Business Plan to Work	WED DEC 7 9 AM MST	Webinar	N/A
Getting Into Local Foods	THURS NOV 24	Workshop	Parkland County
Troubleshooting Shelf Life	TUE JAN 10	Workshop	Lacombe
Closing the Gap: Creating a more profitable business	WED JAN 11	Workshop	Airdrie
Marketing Meats	WED JAN 11 9 AM MST	Webinar	N/A
On-Farm Retail	WED JAN 18	Tour	South of Calgary
Human Resource (HR) Essentials	TUE JAN 31	Workshop	Airdrie
Human Resource (HR) Essentials	WED FEB 1	Workshop	Stony Plain
Getting Into Farmers' Markets	WED FEB 8	Workshop	Parkland County
Getting Into Farmers' Markets	THUR FEB 9	Workshop	Airdrie
Marketing Your Story: Lepp Family Farm	WED FEB 15 9 AM MST	Webinar	N/A

The following table shows Explore Local upcoming events in date order. For more information about the event and for registration information, visit the Explore Local website and click on the Events tab.

Event Name	Date	Event Type	Location
Marketing Essentials: Intro to Marketing	THUR Feb 16	Workshop	Stony Plain
Turning Complaints into Compliments	WED MAR 1	Workshop	Olds
From Farm To Market (Farm Fresh School)	THUR-FRI MAR 2 - 3	Conference	Olds
Human Resource (HR) Essentials	WED MAR 8 9 AM MST	Webinar	N/A
Marketing Essentials: Intro to Marketing	THUR MAR 9	Workshop	Camrose
Getting Into Retail	TUE MAR 14	Workshop	Lacombe
Marketing Essentials: Telling Your Story	THUR MAR 16	Workshop	Stony Plain
Getting Into Local Foods	TUE MAR 21	Workshop	Lethbridge
Getting Into Local Foods	WED MAR 22	Workshop	Airdrie
Getting Into Local Foods	THUR MAR 23	Workshop	Stettler
Getting Into On-Farm Sales	TUE APR 4	Workshop	Leduc
Troubleshooting Shelf Life	TUE APR 11	Workshop	Airdrie
Food Safety at the Farmers' Market	WED APR 12 9 AM MST	Webinar	N/A
Marketing Essentials: Intro to Marketing	WED APR 12	Workshop	Airdrie
Marketing Essentials: Telling Your Story	WED APR 19	Workshop	Airdrie

Adding it Up: Getting a Handle on Your Greenhouse Financials



Cobra GREEN is a financial software developed by Alberta Agriculture to help greenhouse vegetable growers better understand the numbers behind their business. In this workshop, growers will learn how to use this software to help make their business more profitable and better position themselves for lending opportunities.

February 15 and 16, 2017

Agriculture Building

5030 – 50 Street, Lacombe, AB

Registration Deadline: February 10

March 8 and 9, 2017

Red Hat Co-op

809 Broadway Ave NE, Redcliff, AB

Registration Deadline: March 3

Cost: \$10/person + GST (includes lunch)

To Register: 1-800-387-6030

For more information: Dustin Morton, Commercial Horticulture Specialist
780-679-1314

Agritourism and Farm Direct Marketing Workshop

Featuring

Mark Saunders and Angela Grant of Saunders Farm

9 a.m. - 3:30 p.m.; February 28, 2017

100, 5401 - 1 Avenue South, Lethbridge, Alberta (Agriculture Centre)



Cost: \$25 (plus GST)

(includes lunch and refreshments)

To register call the **Ag-Info Centre** at

1-800-387-6030

Registration Deadline is February 21, 2017.

For further information about the workshop

contact Colin Gosselin at **780-968-3518** or

colin.gosselin@gov.ab.ca

Mark and Angela will guide participants through this hands on agritourism and farm direct marketing workshop. They will help farms leave with tangible ideas and plans for their businesses.

Topics Include

- **Customer Service**
- **Staff Management and Training**
- **Pricing for Profit and Sustainability**
- **Marketing**
- **Products** (farm dinners, events etc.)



Mark and Angela lead the award-winning Saunders Farm near Ottawa, Ontario. Originally a strawberry U-pick operation, the farm has grown and redefined what a family farm can be. They have had over one million guests, and now welcome nearly 60,000 people each year to their Haunting Season. Mark and Angela are also active leaders with the North American Farmers' Direct Marketing Association.

Strawberry Production Workshop

**March 1, 2017 – Pomeroy Inn & Suites at
Olds College (4601 46 Ave) – Olds, AB**



This workshop provides new or potential strawberry producers with a detailed outline of all aspects of strawberry production in Alberta. Sessions include information on the production of June-bearing and day-neutral strawberry types, including establishment, maintenance and harvest of strawberries.

11:30 a.m. – 12:30 p.m. registration

Lunch: 12 – 12:40 p.m.

Sessions run 12:45 to 5:30 p.m.

Register: 1-800-387-6030

Registration deadline:

February 21, 2017

Cost = \$20/person (plus GST)

Lunch and snacks provided

Potato Post-Harvest Management



This workshop will provide fresh and seed potato growers with in-depth information on potato storage design and management, as well as pre-harvest, post-harvest, in-storage and post-storage disease management information. This will increase their capacity for prolonged quality potato storage, as well as reduce losses that occur in storage or in the post-harvest process.

March 7, 2017 – Coast Lethbridge
Hotel & Conference Centre – 526 Mayor
Magrath Drive South – Lethbridge, AB

March 8, 2017 – Lacombe
Memorial Centre – 5214 50 Avenue –
Lacombe, AB

March 9, 2017 – Hazel Bluff
Community Hall (9 km west of Westlock on
HWY 18) – Westlock, AB

8 a.m. registration
Sessions run 8:45 a.m. to 4 p.m.

Register: 1-800-387-6030
Registration deadline: February 28, 2017
Limit of 2 registrants per farm operation

Cost: \$15/person (plus GST)

Lunch and snacks provided

Each farm operation will receive a binder of
resource information.

Problem Pests in Horticulture Crops



This workshop will provide rural landowners, market gardeners, garden centre owners and those that work to support these groups with information on the identification and management of a range of current problem pests (diseases and insect pests) that affect fruit, vegetable, potato and tree/shrub crops in Alberta. Participants will build their knowledge and capacity to pass on this information to others.

March 14, 2017 – Airdrie
Agriculture Centre – 97 East Lake Ramp NE
– Airdrie, AB

March 15, 2017 – Lacombe
Memorial Centre – 5214 50 Avenue –
Lacombe, AB

March 16, 2017 – Strathcona
County Community Centre – 401 Festival
Lane – Sherwood Park, AB

8 a.m. registration
Sessions run 8:45 a.m. to 4:30 p.m.

Register: 1-800-387-6030

Registration deadline: March 6, 2017

Cost = \$10/person (plus GST)

Lunch and snacks provided

2016 – A Year in Review

It is always challenging to attempt to sum up a year, since it tends to be one-sided and biased towards the experiences of the writer. That being said, it is always good to reflect on the year and what happened, if only to gain perspective on your individual situation. The biggest challenge is dredging up all of the things that you suppressed over the past year. Sigh...

2016 was a bit of a strange year, with the standard run of challenges that seemed to pop up unexpectedly. Some sectors did ok this year, despite a tough start, while others didn't do as well, largely due to the rough start.

If you are interested in the weather, Alberta Agriculture and Forestry (with some other provincial and federal departments) has a dazzling array of weather stations gathering data from across the province. Even better is the fact that much of this data is analyzed and you can access all sorts of interesting things on the Alberta Climate Information Service website (www.agriculture.alberta.ca/acis/). There are maps, individual station data reports and much, much more.

- Winter 2015/2016 was the strangest one that I can remember, with extremely mild temperatures through much of January and February. At some points, temperatures reached the positive teens, even in places that don't typically get chinook weather conditions. It was very odd. Of course, this was balanced out with bouts of horrifyingly cold temperatures, just to keep us honest.
- The growing season started off with things being very, very dry. There were major concerns, across the agriculture industry as a whole, about how the season would progress in the absence of moisture. In many cases, the worries about the D-word (*drought*) ended in a single day around the May long weekend, with a big dump of moisture. For some, dry conditions did not end until into July, however, when the dry conditions ended, they ended significantly. For the most part, most parts of the province ended up well above average for precipitation and soil moisture levels. In fact, some areas were at 50 year high levels. No arks were reported to have been constructed, but things were pretty sloppy in places. Wet conditions during and after harvest made field crop harvest a really challenge.
- In early May, many berry crop producers across Central Alberta received a devastating heavy frost, right about the time the Saskatoon berries were flowering. There was significant crop loss for many producers, making it a lean year. In some cases, some crop was able to be harvested and processed and/or stored product could be sold. Most other crops seemed to have come through just fine.
- Severe weather events seem to be a perennial challenge for producers most of the time now, although it wasn't something that came up a whole lot in calls over the season (thankfully). Hail seems to be the usual (bad) flavour of the day, with few severe incidents reported.
- Some of the diseases that we've been concerned about in recent years, particularly Late blight of potato and tomato, were not reported or discovered in any major way this season (for a second year in a row), likely due in large part to improved monitoring and careful management in crops. At the same time, there weren't many other common diseases reported in any horticulture crops this season, which is good.
- Monitoring for problem and/or invasive insect pests, which has been ongoing for the last several seasons, was minimal due to staff and resource restrictions in 2016. Monitoring in some locations by individual producers found some pest issues, but mostly things were quiet. Spotted Wing Drosophila (SWD) is still a major concern for Alberta, as it is a major problem across North America. The main concern is still day neutral strawberries (fall production) and raspberries (especially fall-bearing types). Levels of SWD are still not such that you might be looking at significant inputs for control/management, but there is definitely a potential need in coming years for increased monitoring and vigilance. More training for individual producer monitoring is coming this next year.
 - Other insect pests, such as Brown Marmorated Stink Bug (BMSB) and Swede Midge, weren't picked up this year, at least not in traps in horticulture crops.
 - In commercial potato crops, monitoring for insects such as Potato Psyllid is ongoing, with some insects trapped, however none were infected with the pathogen of concern (the one that causes Zebra chip)
- Some proposed changes to legislation or the introduction of new programs kept most producers engaged in a process of understanding the potential impact on their operations. This happened throughout most of the year and will continue to be a factor in the coming year.
- Horticulture extension programming was again quite extensive in 2016, with numerous events offered throughout the winter, spring, summer and fall. Webinar offerings were maintained this season, and topics appeared to be more appealing to growers and industry. Topics were highly variable for programming, with something for everyone. While we offered many different events for people to learn at, we also were able to talk to many people on the phone or via email. It was a rewarding year and we hope that we were able to help out in a positive, impactful way.

Strawberry Bud/Clipper Weevil

Anthonomus signatus

Crops Affected:

Strawberry

Life Cycle:

- Dark reddish-brown weevil with long snout
- Adults overwinter in fencerows & shelterbelts
- Emerge in early spring (when 16°C) to feed on available plants
- Punch hole in flower bud to feed
- Females lay eggs in holes in flower bud
- Move down the stem & clip flower stem to prevent bud from opening and exposing the larvae
- Larvae develop within flower bud (3-4 weeks)
- Adults from larvae, feed briefly & overwinter
- 1 generation per year

Symptoms:

- Obvious symptom = Clipped flower buds
- Dead flower stems turn straw-coloured
- Holes in flowers and petals

Monitoring:

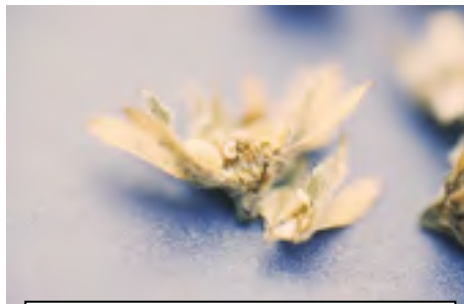
- Monitor fields in May when flower buds begin to develop
- Look closest to woodlots, shelterbelts and field margins first
- Sample 0.6 m of row in 5 locations in each field 2 times per week from pre-bloom onwards
- Economic threshold = 13-20 clipped buds per metre of row

Management:

- Minimize the amount of trash in & around fields during mid to late summer
- Separate new plantings from infested plantings
- Tillage of old fields immediately after harvest will reduce clipper populations by harming pupal stage
- Some chemical products are registered for management of this pest. See pesticide labels for application instructions.



Clipper weevil adult
Photo by NYSAES-Cornell



Clipper weevil larvae in blossom
Photo by MAFRI



Clipper weevil damage
Photo by MAFRI

Sclerotinia Rot

A.k.a. White Mould, Cottony Soft Rot, (Lettuce) Drop,

Causal Organism: *Sclerotinia sclerotiorum*

Crops Affected:

Carrots, lettuce, celery, beans, Cole crops, potatoes, peas, cucurbits (pumpkins, cucumbers, squash, melons), solanaceous crops (tomato, pepper, eggplant), various weed species (e.g. cruciferous), canola, soybeans, etc. (over 400 host species)

Disease Cycle:

- Soil-borne sclerotia (hard mycelial bodies) produce mycelium, which infect plant tissues
 - Sclerotia can survive for over 10 years in the soil
- Sclerotia can also produce little mushrooms (apothecia), which release spores
 - Spores can infect weak tissues in high and prolonged humidity conditions
- Disease develops at temperatures above 0°C, but prefers 13-18°C for optimum growth.
- High humidity and free moisture also contribute to disease infection

Symptoms:

- May initially cause damping off or petiole infections, with leaves and crown areas becoming infected, especially those in contact with the soil
- Infected tissues typically turn dark brown and a characteristic white, cottony mycelium covers it
- Some crops exhibit a wilting of infected tissues (e.g. lettuce)
- Black sclerotia (hard, mycelial, overwintering bodies – not spores) form in diseased tissues later on, sometimes within tissues
 - Size of these will vary, but are often large (may resemble rat droppings or Tic Tacs)
 - May be flattened, rounded, oval or disc-like
- In storage (specifically carrots and cabbage), a watery soft rot is first observed, followed by darkened tissues, which gradually are covered with the white mycelium, with sclerotia forming in the middle of the mycelial growth
- This disease can be distinguished from similar diseases by the cottony white mycelium and the black sclerotia
 - Bacterial soft rots do not form mycelium and are slimy

Management:

- Rotate to non-host crops; maintain a 3-5 year rotation to reduce soil borne inoculum
- If possible, remove infected debris from growing areas to reduce inoculum
- Control weeds, as they are both alternate hosts and can contribute to increased relative humidity
- Ensure good air circulation within the canopy
- Ensure good soil drainage
- Research has found that controlling canopy density can significantly reduce disease levels
 - Use reduced rates of nitrogen
 - Use varieties that are more upright or that have thinner tops
 - Trim the canopy (reduce leaves up to 40%) to ensure good air movement
 - Trimming also severs the connection between older, weak leaves that lie on the soil surface, reducing crown infection
- Rapidly cool harvested crops and store crops such as carrots at constant 0°C
- Ensure storage areas and containers (e.g. pallets, etc.) are properly sanitized, to remove any sclerotia that may adhere to surfaces
 - If possible, avoid use of storage equipment (bins, pallets, etc.) that are made of organic materials
- Preventative chemical sprays are available to protect various crops. Follow label instruction for maximum impact

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