



The change in seasons continues to loom (sometimes I think that I'd like it to just change ALREADY) and the growing season wraps up and draws to a close. Hopefully it has been a good one for you. Regardless, another edition of Hort Snacks is ready for you.

In this edition, you'll find a huge number of workshops, webinars, events, conferences and whatnot for you to fill yourselves to the brim with knowledge and ideas. I hope that you'll take a bit of time this winter to attend some of them, since many are low cost and all have a lot to offer you. There is something for all tastes.

In the coming weeks, you will also receive a survey about this newsletter. After 6 years of Hort Snacks, with a doubling of the readership from inception to present day, it is time to get some in-depth information and feedback from you on the content, value and continued/future direction of the newsletter, so that it continues to meet your needs. The survey will come via email or in hard copy, just like how you receive the newsletter. I hope that you'll take the time to complete it and send it back.

On that note, I hope that you'll take some time after the growing season closes to recharge your batteries and mend a bit, if that is needed. Write down the urgent thoughts and impressions from the season and then step away for a little while. Take care. See you soon.

Rob Spencer/Dustin Morton, Commercial Horticulture Specialists
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FEATURED WEBSITE

Because who DOESN'T love a good website full of bug and disease pictures...

[Bugwood Image Database](#)

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.

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THINGS TO DO / THINGS TO THINK ABOUT THIS MONTH

- Dedicate some time to reviewing this past season
 - What went well?
 - What could have been different?
 - What changes might be implemented next year?
 - Make sure all your records are up to date
 - Gaze into your own crystal ball – what do you anticipate might happen or be an issue next year? – What can you prepare for
- Start thinking about your plant requirements (and probably put your orders in) and your various association memberships
- Take time to overhaul irrigation and spray equipment before putting it away for winter
- Plan to visit or contact a number of fellow producers over the course of the winter (at meetings or courses) to discuss successes and failures. Identify 1 or 2 specific individuals that you think you could learn from.
- Plan to attend at least 1 or more workshops / courses over the winter
 - Register for workshops
- If you haven't applied winter protection to strawberries or fall-planted garlic, it should be done this month before hard freezes arrive and kill off plants
 - Strawberry plants can be damaged and killed by exposure to temperatures below -6°C to -9°C
- Application of Casoron to Saskatoon berries should be done prior to snowfall, after the ground has cooled off
 - Remember to carefully adjust the rate for banding
 - If you are planning on rejuvenation or renovation pruning, do not apply Casoron, or plants will be damaged



Q: Which market channel is the most profitable for your operation?

A: Not having my own market channel, I can only speak to the numbers that I see each year in the Price survey. Profitability is subject to many factors, but if the price per pound is any indication, it would seem that farmers' market prices are the highest. However the cost of labour and transportation can really take a bite from the profit margin.

Next Month's ? → [What creative solutions do you utilize to deal with labour challenges?](#)

MENTAL SNACKTIME – Profit

"Many receive advice, only the wise profit from it." –
Harper Lee

"Life is divided into three terms - that which was, which is, and which will be. Let us learn from the past to profit by the present, and from the present, to live better in the future." –
William Wordsworth

"Profit is not the legitimate purpose of business. The legitimate purpose of business is to provide a product or service that people need and do it so well that it's profitable." –
James Rouse

"Know how to listen, and you will profit even from those who talk badly." – Plutarch

"Entrepreneurial profit is the expression of the value of what the entrepreneur contributes to production." –
Joseph A. Schumpeter

"Between calculated risk and reckless decision-making lies the dividing line between profit and loss." – Charles Duhigg

Upcoming Conferences / Workshops

November 2015

- **Explore Local Webinar - Creating and Delivering a Cost-Effective Advertising & Marketing Plan**
Nov 3, 2015
- **Saskatchewan Green Trades Conference**
Nov 4-5, 2015 – Saskatoon Inn, Saskatoon, SK
<http://www.saskgreenhouses.com>
- **Marketing Made Easy workshop**
Nov 5, 2015 – Calgary Sunnyside Farmers Market – Calgary, AB
To register – 1-800-387-6030 – See [Coming Events](#)
- **Potato Growers of Alberta Annual General Meeting**
Nov 17-19, 2015 – The Sheraton – Red Deer, AB
www.albertapotatoes.ca
- **Green Industry Show & Conference**
Nov 19-20, 2015 – BMO Centre at Stampede Park, Calgary, AB
Garden Centre Bus Tour
Nov 18, 2015 – Calgary area
www.greenindustryshow.com
- **Explore Horticulture**
Nov 28, 2015 – Lacombe, AB
To register – 1-800-387-6030 – See [Coming Events](#)

December 2015

- **Great Lakes EXPO Farm Market Bus Tour**
Dec 7, 2015 – Grand Rapids, Michigan
<http://bustour.greatamericanmediaservices.com/>
- **Great Lakes Fruit, Vegetable and Farm Market Expo**
Dec 8-10, 2015 – DeVos Place Convention Centre – Grand Rapids, MI
www.glexpo.com
- **Explore Local Webinar - Explore Local Business Growth (Case Story) – Arber Greenhouses**
Dec 8, 2015
- **Hort Snacks @ Night – Cost of Production**
Dec 8-10, 2015 – Redcliff/Wetaskiwin/Grande Prairie
To register – 1-800-387-6030 – See [Coming Events](#)
- **Hort Snacks To Go Webinar – Interactive greenhouse bedding plant and issues diagnostics**
Dec 14, 2015

SAVE THE DATE

The **Alberta Farm Fresh School** is set for February 25-26, 2016 at the Pomeroy Inn & Suites in Olds, AB (on Olds College campus)

Watch www.albertafarmfresh.com for details.

Upcoming Conferences / Workshops

January 2016

- **North American Strawberry Growers Association (NASGA) 2016 Berry Conference**
Jan 7-9, 2016 – Savannah International Trade & Convention Center, Savannah, Georgia
www.nasga.org
- **Explore Horticulture**
Jan 9, 2016 – Airdrie, AB
To register – 1-800-387-6030 – See [Coming Events](#)
- **Explore Local Webinar – The Bumble Beets Way**
Jan 12, 2016
- **Hort Snacks @ Night – Human Resources**
Jan 12, 13, 20, 2016 – Okotoks/Wetaskiwin/Grande Prairie
To register – 1-800-387-6030 – See [Coming Events](#)
- **Pricing for Wholesale & Retail**
Jan 12, 14, 2016 – Leduc / Airdrie, AB
To register – 1-800-387-6030 – See [Coming Events](#)
- **Potato Expo 2016**
Jan 12-14, 2016 – Mirage Hotel & Casino – Las Vegas, Nevada, USA
www.potato-expo.com
- **Saskatchewan Fruit Growers Association (SFGA) 27th Annual Conference**
Jan 15-16, 2016 – Saskatoon Inn, Saskatoon, SK
www.saskfruit.com
- **Hort Snacks-to-Go Webinar – Customer Service**
Jan 18, 2016
- **Agronomy Update 2016**
Jan 19-20, 2016 – Sheraton Red Deer – Red Deer, AB
Ropin' the Web (www.agriculture.alberta.ca) – Coming Events
- **Irrigated Crop Production Update 2016**
Jan 19-20, 2016 – Lethbridge Lodge – Lethbridge, AB
Ropin' the Web (www.agriculture.alberta.ca) – Coming Events
- **Marketing Made Easy workshop**
Jan 20, 2016 – Fort Saskatchewan, AB
To register – 1-800-387-6030 – See [Coming Events](#)
- **Farm Direct Marketing Forum**
Jan 21, 2016 – Stony Plain, AB
- **Explore Horticulture**
Jan 23, 2016 – Westlock, AB
To register – 1-800-387-6030 – See [Coming Events](#)
- **Scotia Horticultural Congress 2016– “Partnering for Farm Success”**
Jan 25-26, 2016 – Old Orchard Inn Convention Centre – Greenwich, NS - <http://www.horticulturens.ca/scotia-horticultural-congress/>
- **Manitoba Potato Production Days**
Jan 26-28, 2016 – Keystone Centre – Brandon, MB
www.mbpotatodays.ca
- **47th Annual Northwest Agricultural Show**
Jan 26-28, 2016 – Portland Expo Centre – Portland, Oregon, USA
www.nwagshow.com
- **FarmTech 2016**
Jan 26-28, 2016 – Northlands Expo Centre – Edmonton, AB
www.farmtechconference.com
- **18th Annual Pacific Agricultural Show**
Jan 28-30, 2016 – Tradex Exhibition Centre – Abbotsford, BC
www.agricultureshow.net
- **35th Annual Guelph Organic Conference & Expo**
Jan 28-31, 2016 – Guelph University Centre, Guelph, ON
www.guelphorganicconf.ca



HortSnacks-to-Go: 2015/2016 Webinar Series



To register call Dustin Morton at
403-742-7571 or email at
dustin.morton@gov.ab.ca

September 28 (3 PM MST) –

Dustin Morton, Alberta Agriculture and Forestry
Dustin will be discussing the results of an Alberta Agriculture and Forestry project looking at greenhouse energy and material efficiency and how best to manage these in your greenhouse operation.

October 19 (3 PM MST) –

Dr. Chieri Kubota and Mark Kroggel, University of Arizona

Long popular in Japan and Europe, hydroponic strawberry production has largely been ignored in North America. Chieri and Mark are looking to change this with their research and will discuss some of what they've discovered along the way.

November 16 (3 PM MST) –

Grace Fedak, Serviceberry Farms

Grace Fedak has been growing some of the best strawberries in Alberta for over 20 years on her heavily treed Strathmore area farm. As her shelterbelts have aged, Grace has begun to switch them to eco-buffers and will talk about her successes and failures along the way.

December 14 (3 PM MST) –

Dr. Jim Faust, Clemson University

Jim is an associate professor of Floriculture at Clemson University and an expert in the area of diagnostics. Over the hour webinar, he'll be running an interactive "Name that problem" with some bedding plant and greenhouse issues he has seen over his career.

January 18 (3 PM MST) –

Christie Pollack, Christie's Gardens and Greenhouses

As owner of Christie's Gardens and Greenhouse in High Prairie, Christie Pollack is passionate about customer service. She'll discuss how to engage even your most problematic clients without alienating and provoking them.

February 22 (3 PM MST) –

Dr. Laura Van Eerd, University of Guelph

Laura is an associate professor at the University of Guelph in the area of soil fertility and cover crops. A proponent of on-farm trialing, she will tell you what you need to set up your own on farm trialing so you get the biggest bang for your buck from new products and techniques.

March 21 (3 PM MST) –

Dr. Ken Fry

Ken is a world renowned entomologist and is passionate about the role of beneficial insects in cropping systems. He'll be talking about how to encourage these natural enemies in your horticultural crops to improve your crop health and ultimately your bottom line.



Standard Operating Procedures **Price: FREE**

Connie Kehler from the Saskatchewan Herb and Spice Association discusses incorporating SOPs into your operation, writing for internal vs external clients and how to avoid sharing too much.

- **October 27, 2015** – Fork in the Rowed, Coaldale, AB **Start Time: 7 p.m.**
- **October 28, 2015** – Country Road Greenhouses, Sherwood Park, AB **Start Time: 7 p.m.**
- **October 29, 2015** – Green Island Garden Centre, Fairview, AB **Start Time: 7 p.m.**

Cost of Production **Price: \$15.00 (Dinner included)**

Erin Pirro of Farm Credit East will dive into the issue of cost of production, calculating it in your operation and how to address a multitude of production scenarios.

- **December 8, 2015** – Red Hat Co-op, Redcliff, AB **Start Time: 3:30 p.m.**
- **December 9, 2015** – Arber Greenhouses, Wetaskiwin, AB **Start Time: 5:30 p.m.**
- **December 10, 2015** – Grande Prairie Provincial Building, Grande Prairie, AB **Start Time: 5:30 p.m.**

Registration: RSVP to 1-800-387-6030



Explore Horticulture!



Horticulture is a broad and diverse industry full of opportunities! This workshop will look at different methods of production and marketing with Agriculture and Forestry specialists. Participants will also get a chance to talk to a new entrant to the industry about their production and marketing techniques.

November 14, 2015
(Lethbridge Exhibition Park, Lethbridge AB)

November 28, 2015
(Legion Hall, Lacombe AB)

January 9, 2016
(Agriculture Centre, Airdrie AB)

January 23, 2016
(Hazel Bluff Hall, Westlock AB)

To register call 1-800-387-6030

Cost: \$15 + GST per person (includes lunch)

8:30 a.m. Start

Growing Forward 2 

A federal-provincial-territorial initiative

Alberta 
Government

Canada 

Employee Empowerment & Retention Through Sowing Carrots

At this time of year, you are just past the mid-point of your summer growing season, with eyes on the end of the season and the fall. Your focus is probably on maintenance – keeping the plants healthy and growing, harvesting the crops that are ready, and getting the crops to the customers. These are good focal points for any producer to have.

At the same time, you are also focused on helping/encouraging any employees to maintain a steady, constant pace and get the most value from their labours. With labour being one of the most significant production expenses in any operation, this is good business practice. Employees are a critical component in any operation (unless you like to work like a rented mule). Keeping your employees productive is challenging, especially since no two employees are the same. To put a twist on it, how many of you think about employee retention mid-way through the season? That topic is probably not even halfway to the forefront of your mind. You might even question if they are related. I'd suggest three things. First, employee productivity is pivotal to successful, profitable operations. Second, employee productivity and employee retention are intricately connected. Third, employee retention (and rehiring, recruiting, etc) is like many important issues; we don't deal with them until after the fact or "later", which is too late.

So what do carrots have to do with any of those three things? Allow me to explain.



A few years ago, I took part in a tremendous leadership course. Like all good courses (in my opinion), I came away not just with many tidbits of information and tools to use in different aspects of my life, but also taken a good look at myself from different angles; I saw ways to make some improvements and changes. One thing that was discussed was the importance of offering feedback: specific, direct feedback, coupled with suggestions for continued action. It could be used constructively, or to express appreciation or thanks. Following the course, with these things on my mind, my brother-in-law shared a few different books with me which highlighted the importance of recognition and introduced the concept of "creating a carrot culture" within any particular organization.

"Managing with Carrots" – Adrian Gostick & Chester Elton
"24-Carrot Manager" – Adrian Gostick & Chester Elton

Carrots = recognition and rewards (in a range of forms) and the authors postulate that organizations that freely sow carrots throughout (and encourage them to grow and reseed) have higher morale, greater productivity, better retention and greater creativity. As growers of carrots (and other things), who better than us to apply these sample principles.

Employee Productivity (Happy employees work harder and better)

Employees are critical to any operation. They do a lot of the work, are often the face of the operation and, if harnessed correctly, can contribute to taking your operation on to bigger and better things.

Things have changed since your father's and grandfather's generation (note - if you are the grandfather, you'd better tune in even more). People aren't content to work just for the sake of working. They want "more". More could be any number of things. Many workers need motivation more than direction. They want to know why, even more than how. They are motivated differently and have different expectations from their jobs. Most want to be valued not only for their blood, sweat and muscles, but also for their individual spark and creativity. They want to be involved. This is pretty big shift, but an important one to understand.

By taking the time to recognize our employees (or even those who encircle us in our different “lives”, a.k.a. roles), we strengthen our relationships and solidify their ties to what we are trying to accomplish and to our organization. By recognizing the potential value of each individual (not just in our minds, but showing it externally to the individual), we suddenly have someone that is walking right there alongside of us. We get someone that is committed not just to putting in time, but that wants to make things better and more successful. People become creative, innovative and at that point, productivity has the potential to really explode.

Employee Retention (Happy employees will stick around and keep being productive)

I'm not all that old, but even I can see a serious shift in the attitude and work ethic of “young” workers (like it or not, they are the future workforce). It is harder to find good workers than ever before and even harder to keep them. Yet, we don't spend all that much time of this aspect. As I suggested before, we often don't think about retention until we see the back end of someone. Too late.

If we accept that recognition is the way to make people happier and more productive, it isn't a long leap to see that the same principle applies in retention. Productive employees feel valuable and valued employees will stick around. As humans, we tend to stay where we are happy. Applying significant effort to recognizing our employees will pay dividends towards our long-term success.

Sowing Carrots – Providing Recognition

So, how does one provide recognition and express appreciation for your employees? How do we reward not just good behaviour, but recognize and encourage great innovation and significant, meaningful contributions to the operation? How do you help employees feel valued or that they are a contributing part of your operation? The first important step for any of us is to realize that people aren't clones, but have different wants and needs and are motivated by different things. According to Gostick and Elton, you need to recognize that employees want more than just bread, but need carrots as well.

One of the more traditional ways to recognize, motivate or reward has been to provide monetary rewards or incentives, but one thing that the authors suggested was that money (or bread) is not the greatest motivator, at least not in the long term. Gostick and Elton say that *“Money doesn't buy love; it doesn't buy happiness; it doesn't buy commitment”*. And that is really what we are after, isn't it? Commitment.

Gostick and Elton outline a few of the things that employees are really looking for, or the carrots that need to be offered to employees. They say that employees “crave:

- Knowing what is expected of them
- Having the tools to do a good job
- Having the opportunity to do what they do best
- Receiving recognition or praise for good work”

These seem like pretty simple things, but ultimately, aren't these what any of us want? To clearly understand the goals and direction we before us; to have the right tools, so that we can actually do the job right; to be able to focus our energies and attention on what we excel at; to be recognized for doing something worthwhile.

The beautiful thing is that sowing and providing carrots doesn't have to be a huge undertaking or expensive. It can (and probably should) be made up of small, simple and definitely genuine things. Personalized, individual actions can really give long term value to both you and the people that work in your operation.

To give the last word to Gostick and Elton, *“In today's competitive crunch, nothing beats carrots. Stick with bread alone, and you might just end up toast!”*

INSECT OF THE MONTH

Greenhouse Whitefly

Trialeurodes vaporariorum

Crops Affected:

most greenhouse vegetables and herbaceous ornamentals – e.g. tomatoes, peppers, poinsettias, etc.

Life Cycle:

- Related to aphids, scales and mealybugs
- All stages feed by piercing and sucking plant parts (stems and leaves)
 - Excess fluids are excreted as “honeydew”
- Adults
 - Tiny insects with yellowish bodies and 4 whitish wings
 - Wings and body appear white due to a whitish wax covering
- Eggs are tiny and oblong and are laid on the underside of the leaves
- Nymphs
 - There are 4 nymphal instars
 - 1st instar is tiny and is referred to as the “crawler” stage
 - Crawlers tend to find a location to feed and settle in
 - Later stages tend to be immobile and flattened, much like scale insects
 - 4th instar nymphs have characteristic very long waxy filaments and a fringe around their edge
- The rate of development between stages is rapid, with rate increasing in warmer conditions
- Populations tend to develop on leaf undersides

Symptoms:

- Plants may appear off-colour or stunted
-
- Feeding of large populations can result in leaves turning yellow, drying up and falling off
- Leaves may be covered by a sticky honeydew excretion
- Black sooty moulds may develop on plant surfaces
-

Monitoring:

- Visually inspect plants for signs of infestation
 - Look for eggs, nymphs or adults on lower and upper leaf surfaces
- Yellow sticky traps can be used to monitor populations of whiteflies
 - Set up cards both inside and outside the greenhouse
 - 1-4 cards should be used per 1000 square feet
 - Hang cards level with the top of the canopy, as well as near doors, vents and other openings
 - An economic threshold of 0.5 whiteflies per card per day for a young crop and 2 whiteflies per card per day for mature crops
- Flag infested areas
- Increase frequency of scouting during warmer weather

Management:

- Natural enemies can keep smaller populations in check, however in greenhouses, the introduction of predators and parasites can be effective at controlling whitefly populations
- Registered biological controls (biopesticides) can be used to manage populations
- Registered pesticides can be used to knock down population outbreaks, however this will affect biological controls that may be in place
- In some scenarios, the use of reflective materials (e.g. mulches) and traps can be effective
- Proper sanitation is also an important management tool



Greenhouse whitefly life cycle –
eggs, nymph stages, adults

Photo by: Whitney Cranshaw, Colorado
State University, Bugwood.org



Greenhouse whitefly nymph and adult

Photo by: David Cappaert, Michigan State
University, Bugwood.org

DISEASE OF THE MONTH

Black Knot of Prunus

Causal Organism: *Apiosporina morbosa*

Crops Affected: all plants within the genus Prunus, including various species of cherries (chokecherry, Nanking cherry, pin cherry, sand cherry, sour cherry, etc.), plums, almond, etc.

Disease Cycle:

- Ascospores are produced on mature galls in the spring, infecting growing points
- Infection causes an increase in xylem and phloem cells in the stem
- The disease will develop internally and externally
- Galls will grow in size each year, producing spores annually
- Plant structure is affected and branch strength may be reduced
- Eventually, plants may die
- A single infected tree or bush can infect a wide area

Symptoms:

- The most recognizable symptom is the presence of a black tar-like swelling on branches of infected plants
 - Sometimes vulgarly described as resembling "poop-on-a-stick"
- Initial symptoms include a small swelling or gall at a succulent growing point or fruit spur
- Swellings grow in size and eventually become ruptured, hard and black
 - Galls may be 6 or more inches in length
 - Galls may also occur at branch junction points and on scaffold limbs
- Galls may eventually be colonized by secondary fungi, which can reduce sporulation

Management:

- Remove sources of inoculum in adjacent areas
- Prune out infected branches during the dormant season, when plants are dormant and galls are highly visible
 - Galls should be pruned out, with cuts being made at least 6 inches beyond obviously infected materials
 - Pruning cuts should be made to an appropriate point (healthy collar, etc.)
 - If possible, pruning tools may be disinfected between cuts, however this may be difficult or impractical in many situations
- Destroy infected material by burning, burial and/or proper composting, or removal from the site
- Ensure plants are healthy and free from stress
- Ensure adequate canopy ventilation
- Chemical controls are limited, fairly ineffective and expensive
- Consider hiring a [certified arborist](#) for complex pruning activities



[Pest Management Regulatory Agency](#)
(PMRA) –

[Electronic Label Search Engine](#)

Search the database for electronic labels

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Swollen tar-like galls of various sizes are visible on branches and branch junctions
Photos by Tricia Simon