

THE GROWER

JULY 2017

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A salute to Canada's horticultural history



A tenth-generation descendant of farmers from New France, Norm Charbonneau and his son Luke carry on the honourable tradition growing strawberries near Port Elgin, Ontario. Nothing is more central to the Canadian story than strawberries on July 1st. Happy Birthday, Canada! Photo by Glenn Lowson. See story on page 6.

BROKEN PROMISES

Ontario horticulture is stunned by minimum wage hike

KAREN DAVIDSON

Since Ontario premier Kathleen Wynne proposed a sharp hike to the minimum wage – the current \$11.40 per hour to \$14 per hour for January 1, 2018 and \$15 per hour for January 1, 2019 – farmers have been recalculating their business futures. Already, margins are razor-thin because up to 60 per cent of their costs are attributed to labour.

"This is too much, too fast," says Ken Forth, chair of the labour section, Ontario Fruit and Vegetable Growers' Association (OFVGA). "This is a 32 per cent increase in 18 months and it is now a politically driven issue."

For a decade now, the horticultural industry has made

its case to government that growers are price takers and must compete, not only in a global marketplace but in a domestic marketplace where five grocers control 78 per cent of the retail business. Price pressures are intense. So it was with some compromise that in 2014, growers supported a pragmatic and de-politicized approach by the Liberal government: planned, incremental increases to minimum wage based on a Consumer Price Index (CPI) approach.

In this context, the premier's announcement of minimum wage hikes is a shock, not only in its timing but in its speed of rate increases. The proposed legislation, if it passes second and third reading in the fall of 2017, would be enforced in the

new year, just months before a provincial election that must be held before June 7, 2018.

"Growers are frustrated," says Jan VanderHout, OFVGA chair. "The lack of predictability is unacceptable in terms of how businesses must plan and execute their resources."

Since the first reading of the Fair Workplaces, Better Jobs Act in early June, the OFVGA has been working with a broad agricultural alliance, including beef and dairy, grains and oilseeds. Other employer groups such as the Ontario Chamber of Commerce are likely comrades-in-arms on this issue with its "Keep Ontario Working" mantra.

In the short term, growers are encouraged to write to premier Kathleen Wynne, agriculture

minister Jeff Leal and labour minister Kevin Flynn about their personal assessments as to how the minimum wage increases will affect their businesses. Secondly, growers should be aware of public hearings that will be held across Ontario during July.

Commissioned by the Labour Issues Coordinating Committee (LICC), Al Mussell, Agri-Food Economic Systems, has already generated an insightful report: *Understanding the Significance and Impact of the 2018-19 Minimum Wage Increases for Ontario Fruit and Vegetable Growers*. One reason for this report is that while plenty of wage research exists, none is available for the impact of the premier's timetable that proposes such a big increase in so short a period.

"Research papers show that minimum wage is a poor instrument for dealing with poverty," says Ken Linington, LICC policy analyst. "The Ontario government is blurring the lines between a minimum wage and a living wage."

A minimum wage was designed for entry-level work for students and seasonal workers. As Canadian society ages, there are now many retirees earning this wage as a way to keep active and to supplement income. The political premise that raising the minimum wage is going to provide decent incomes may backfire as jobs are trimmed and prices of consumer goods soar.

Continued on page 3

Looking at you, Canada! PG 6

Berry update PG 8

Farmers' marketing PG 14

AT PRESS TIME...

Kestrels are tops as crop cops

Eight nesting pairs of kestrels, most with maximum clutches of five eggs are exciting growers and researchers this summer in Ontario's Niagara peninsula. Larger than a robin and smaller than a hawk, the kestrel is making a tentative comeback.

"Ian Frensch has a nesting box kit for sale and we want to get the word out to increase the uptake of them," says Brian Gilroy, chair of the property section for the Ontario Fruit and Vegetable Growers' Association.

Kestrels are a predator of starlings and other birds which poach fruit in their prime. Having kestrels nesting in proximity of orchards and vineyards is a natural way to control not only pesky birds but insects, mice and voles.

Last year, the project was honoured with a Regional Premier's Award for Agri-Food Innovation Excellence. The \$5,000 is reinvested this year to continue bird deterrent research with Brock University.

Nesting box kits are available for sale at a cost of \$55 through C. Frensch Company, Beamsville, Ontario. Contact: 905-563-4774 or cfrensch@idirect.com.

Wanted alive!

Colorado potato beetles are what Dr. Ian Scott has in mind for a national survey on tolerance



levels to selected registered insecticides. He's a research scientist with the London Research and Development Centre at Agriculture and Agri-Food Canada (AAFC).

He is looking for approximately 150 "live" beetle adults per sample. If you have a few you can spare, please contact him and he will arrange for someone to come immediately to your farm and take some beetles off your hands. If you are outside of southwest/south central Ontario, a collection kit will be sent that can be returned by overnight courier (pre-paid) to AAFC London, Ontario.

Contact: Dr. Ian Scott at (519) 953-6682 or ian.scott@agr.gc.ca

Impact of wage hikes

Farmers and small business owners are urged to testify at public hearings regarding the Ontario government's intent to raise the minimum wage to \$14/hr by January 2018 and \$15/hr by January 2019. That's an increase of 32 per cent in 18 months.

One family has already gone public with an open letter to Premier Kathleen Wynne. The story of Jackie Fraser and chef

husband Derek Roberts, owners of Fraberts Fresh Food in Fergus, Ontario, made its way to the *Toronto Sun* on June 11. See link: <http://ow.ly/azDX30cBpaQ>

"Putting us out of business is an unintended consequence of this proposed policy," Jackie Fraser said in an online post.

"Maybe our story — our one small business — is insignificant to you, but think of the cumulative impact of thousands of us closing up and each of us putting a dozen people out of work," wrote Fraser.

"Please don't make us roadkill on the political highway."

It's a hectic time of year for farmers to consider attending a hearing. The Standing Committee on Finance and Economic Affairs will be holding hearings during the week of July 10 to 14 in Thunder Bay, North Bay, Ottawa, Kingston and Windsor-Essex. The second week of hearings will be July 17 to 21 in London, Kitchener-Waterloo, Niagara, Hamilton and Toronto. Presenters who can not appear in person can make a presentation via teleconference.

The application deadline for the first week of hearings is July 4. Those wishing to present on the second week must apply by July 10.

Interested presenters must contact Eric Rennie, the Clerk of the Standing Committee on Finance and Economic Affairs at: Eric Rennie Tel. 416-325-3506 Fax: 416-325-3505 erennie@ola.org

NEWSMAKERS

The United Fresh Produce Association has honoured **Peter Quiring** with its FreshTEC Achievement award for his contributions to the greenhouse industry over the last 20 years. Originally a fabricator of greenhouses before becoming a grower, Quiring has pioneered many technology advancements in controlled environments. NatureFresh Farms is based in Leamington, Ontario with another greenhouse in Delta, Ohio.



Peter Quiring, NatureFresh Farms

Nova Scotians have re-elected a Liberal government including **Keith Colwell**, minister of agriculture, fisheries and aquaculture (Preston-Dartmouth). Formerly from a New Brunswick farm which dates back to the 1700s, Colwell is well respected for his support of the horticultural industry, specifically a replant program.

The Ontario Hop Growers' Association has elected its new board including **Albert Witteveen** as president. Joining him are: **Hugh Brown**, past president; **Steve Kitras**, vice-president; **Rob Rombouts**, secretary; **Ian Chester**, treasurer; **Kathy Dingwell**, director; **Dean McConkey**, director; **Dean Workman**, director; **Catherine Crawford**, director. Current membership stands at 103 members.

The U.S. secretary of agriculture **Sonny Perdue** has announced the creation of an undersecretary for trade and foreign agricultural affairs in the U.S. Department of Agriculture (USDA). Perdue made his first trip to Canada on June 5 to meet with Agriculture and Agri-Food Canada minister **Lawrence MacAulay**.

Brothers **Duffy** and **Jordan Kniaziew** were profiled in the *Toronto Star* and *Metro News* on June 5. Their greenhouse-grown strawberries are perfect for date night. **Owen Roberts**, director, research communications for the University of Guelph and a columnist for *The Grower*, is authoring a 22-week series called The New Farm. Here's a link to the story: <http://ow.ly/41td30cp8Wc>



Duffy (L) and Jordan Kniaziew

Peak of the Market has announced two new hires. **Bethany Alards** joins the team at Winnipeg head office as quality control manager, bringing a background in quality assurance in various roles in meat, bread and cheese production and processing facilities. **Duane Hood** joins the team as Calgary distribution centre manager, with more than 25 years of warehouse, logistics and distribution management experience.

Bridget Visser has joined Stokes Seeds as a sales representative in the Bradford, Ontario area. She was formerly responsible for communicating the water project results for the Holland Marsh Growers' Association. She is also a blogger for *The Grower*.

Condolences to the family and friends of **Denton Hoffman**, 77, who passed away June 16, 2017 in Guelph, Ontario. He was the former executive director of Asparagus Growers of Ontario and Ginseng Growers of Ontario from 2005 to 2009. Previously, he led Ontario Greenhouse Vegetable Growers from 1991 to 2002, playing a leadership role in food safety standards. A memorial service is planned for July 8 in Guelph.

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COVER STORY

Ontario horticulture is stunned by minimum wage hike

Continued from page 1

Few politicians seem to account for the cascading effect of wage demands from those working at above entry-level positions.

"It's unfortunate, but this government wants to solve income problems on the backs of employers," concludes Linington.

The optics of the minimum wage issue are difficult for farm employers who value their hard-working employees and do not want to be cast as villains for opposing wage increases.

"We want access to quality employees and want to pay the going rate," says Jan VanderHout, OFVGA chair. "We are not insensitive to the financial needs of those who are part of our team."

But the hard facts of Mussell's report state a much bigger impact on wage structures and future sustainability. Higher wages won't mean much if there's no job – or business --

to wake up to in the morning.

"When the minimum wage increase is so large, it will also affect the strata of higher wage rates," writes Mussell. "But this will not occur proportionately, as the result at much higher wage rates would be an increase in dollars per hour that exceeds the increase in the actual increase in the minimum wage."

Mussell has simulated the increasing wage rates based on aggregate operating returns data for Ontario farms, 2010 – 2014. The aggregate increase in salary expense – the cost to Ontario agriculture by 2019 – is \$406.4 million. The cost to horticulture is estimated at \$225.4 million.

Jan VanderHout, Ken Forth and Alison Robertson, OFVGA executive director shared this economic analysis with the premier's office on June 20.

Next steps?

"The premier's office staff said they would continue to work with us on this issue," said VanderHout.

A grower's letter to the premier

Dear Premier:

I am deeply concerned about the future of fruit and vegetable farming in Ontario.

For social justice reasons, it is admirable that the government is attempting to help those on the margins of society, however, it is possible that horticulture in Ontario will be an unintended casualty of this attempt.

The many other jurisdictions that ship fruits and veggies into Ontario did not just raise the single biggest cost their farmers bear by 30 per cent. Their climates are friendlier, and their production per acre is greater accordingly. Imported food prices will not need to increase by the same order of magnitude.

I have done the calculations over the past couple of days. In order to maintain existing profit margins, the retail asparagus price here at Barrie Hill Farms will need to move from \$2.99/lb to \$3.69/lb, and local Ontario asparagus prices at your grocery store will need to increase by similar amounts.

If imported asparagus from Washington, California, New Jersey, Mexico or Peru is for sale at \$2.49 on the shelf beside Ontario at \$3.69, will consumers

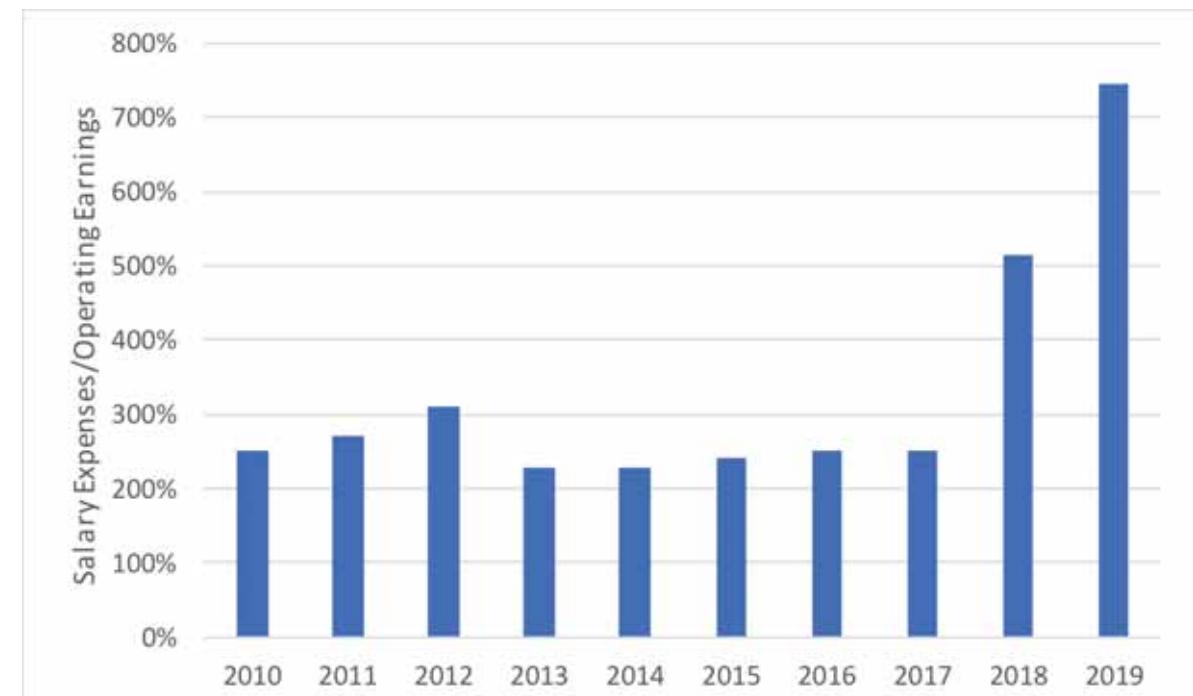
stick with Ontario? When will Farmer Morris just be too pricey? Will Ontario farmers be forced to accept ever dwindling profit margins until profits are gone?

The same story exists for all the local fruits and veggies we grow here in Ontario.

Horticultural crops require a huge amount of manual labour. There is a limit to the amount of mechanization that can be done. People have been trying to develop automatic asparagus and strawberry harvesters for the last 30 years. Over the next 30 years can computers and robotics develop a machine that can work? Only time will tell. Governments talk big about the importance of food security and food sovereignty. Right now, no one seems to be thinking about this. Someone else in the world will always be willing to ship food into Canada. But at what cost?

The question right now appears to be, will consumers continue to be able to afford Ontario? And will fruit and vegetable production even be happening in Ontario when the robots finally can do the work?

*Respectfully,
Morris Gervais, Barrie Hill
Farms, Springwater, Ontario*



Estimated Salary Expense as Proportion of Operating Earnings, Horticulture

“

This is too much, too fast. This is a 32 per cent increase in 18 months and it is now a politically driven issue.

~ KEN FORTH

”



Salary Expenses vs. Operating Earnings, Ontario Horticulture

Source: Understanding the Significance and Impact of the 2018-19 Minimum Wage Increases for Ontario Fruit and Vegetable Growers, Agri-Food Economic Systems



Photo by Glenn Lowson

CROSS COUNTRY DIGEST

BRITISH COLUMBIA

Experiment to disrupt mating of apple clearwing moth

Apple Clearwing Moth (ACM) is a pest of concern in British Columbia's Okanagan Valley. The pest is thought to have been introduced through import of rootstock from Europe. ACM weakens trees, but does not directly affect fruit. ACM larvae burrow under bark and create 'galleries' or tunnels which interfere with tree growth and vitality.

The Apple Clearwing Moth (ACM) project is entering its second year of operation in 2017, with an aim of controlling ACM populations through an area-wide use of pheromones. The main part of the project involved setting out Isomate-P

pheromone dispensers. These dispensers interfere with the mating of the ACM (and coincidentally peach tree borer).

The project was initially based on setting out the pheromone dispensers every other year. However, new information was provided after the first year of the project. The manufacturer only assures pheromone effectiveness for a single season. Some of the pheromone dispensers were sent to a laboratory in March 2017 for testing. The Isomate-P dispenser-lures set in orchards last year have 16 to 27 per cent of pheromone remaining after 303 days in the field. As a

result, the design of the project was modified so that only some of the acreage which received pheromone disruption in year one would receive repeat treatment in years two and three of the project.

A steering committee for the project also noted that the behaviour of the pest is changing. Originally, the larvae of the ACM entered under the bark of the tree near the graft union. Observations of ACM larvae around pruning scars indicate the insect is moving higher in the tree for entry under the bark of the tree.

Growers have been reminded that the area-wide Isomate-P



Apple clearwing moth

project is experimental, so that growers need to continue monitoring and applying conventional treatments to their orchards even where Isomate-P is placed.

Bucket traps were also deployed in 2016, to help monitor ACM. For areas where Isomate-P was placed, the trap will only detect whether the

pheromone is working (which was the case), and there are no trap counts for these treatment areas. Maps will available on the OKSIR.org website.

The project will have an increased emphasis on education for 2017 and 2018.

Source: B.C. Fruit Growers' Association

PRINCE EDWARD ISLAND

Innate spuds in trial plots only

Simplot Plant Sciences will not be commercially introducing its non-bruising Innate potato in Canada in 2017, restricting its presence to test plots in Prince

Edward Island, Ontario and Manitoba.

"Our company is still putting the pieces of the puzzle together, so we're waiting to

commercialize in spring 2018," explains Doug Cole, director of marketing and communications, Simplot Plant Sciences, based in Boise, Idaho. "We need to feel confident in telling retailers that growers will have enough supply and in turn we need to tell growers that there is a market for Innate potatoes."

By next year, generation 2 Innate potatoes should be ready with the trait that has late blight tolerance. It's this trait that growers are most excited about, because it could mean fewer sprays of fungicides. In addition, Cole explains that

there are higher packout levels with Innate potatoes – up to 80 per cent compared to industry standards of 60 per cent. So growers could conceivably plant fewer acres to achieve their target yields, and therefore use fewer inputs.

During the last three years, U.S. acreage of Innate potatoes has grown to 6,000 and the

potatoes are sold in about 4,000 supermarkets in 40 states. The first-generation Innate potatoes are marketed under proprietary names: Cultivate for Innate Russet Burbank, Generate for Innate Ranger Russet, Accelerate for Innate Atlantic and Invigorate for Innate Snowden.

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OTTAWA

Future of a PACA-like deemed trust for Canada's fruit and vegetable growers remains unknown

KAREN DAVIDSON

The Canadian horticultural industry is stymied on the PACA file. Since last month's report, the only fact is that there appears to be no clear ministerial responsibility with a path forward. The public forum of Question Period has revealed only that the file is somewhere between Agriculture Minister MacAulay's office and that of the Innovation Minister Bains.

A summary of events:

- June 7, federal Agriculture Minister Lawrence MacAulay confirmed that Innovation Minister Bains has responsibility.
- June 9, NDP MP Ruth Ellen Brosseau commented in Question Period: "The issue

has been transferred to the Minister of Innovation. What a hot potato! Producers are tired of watching government playing ping pong with their industry. When will the government take its responsibility seriously and implement a financial payment protection for fruit and vegetable producers?"

- June 9, agriculture's parliamentary secretary, Jean-Claude Poissant, responded to her question with more obfuscation, although minister Bains was in the House.
- In responding to industry enquiries, Innovation ministry staff have indicated that, while they would comment on options, Agriculture is the lead.

It is puzzling, at best, to understand why the Liberal government has not kept its promise in the 2015 election to

implement a PACA-like deemed trust in Canada for Canadian producers of fresh fruits and vegetables. Growers are at risk of non-payment for sales to the U.S. as a result of the loss in preferential status related to PACA; no tool exists in Canada, and for some even a single instance of non-payment could be enough to force a small producer out of business.

With a variety of trade negotiations looming, it is likely that financial protection will arise. In the meantime, there are a lot of unanswered questions with respect to which government ministry (or ministries) has been studying the issue in the past year and what, if any, options may have been under development.

INTERNATIONAL

BELGIUM

Strawberry Congress slated for Antwerp



The third International Strawberry Congress will bridge science and commercialization says organizer Leen Matthé of Cooperation Hoogstraten. The event is to take place in Antwerp, September 6.

Keynote speakers include Kevin Folta, professor of genomics and president of the horticulture department at the University in Florida. Then Richard van Hooijdonk will talk about trends and the future in food.

The program comprises two days of lectures, presentations and panel discussions, as well as one day of excursions to Hoogstraten in Belgium and Zundert in The Netherlands.

Early bird registration for \$350 euro ends July 1. Then the price is \$450 euro. Go to: www.iscbelgium.com

Source: FreshPlaza.com

EUROPE

Potato acres at 10-year high

The North-Western European Potato Growers report total planted area at about 1.41 million acres, a 10-year high. Member countries – Germany, Netherlands, Belgium, France and the U.K.—will plant more potatoes than last year, with the biggest increase in Belgium.

Weather could still be a spoiler before harvest, however production increases could tally anywhere from three to 21 per cent.

Currently, stocks are low so a larger 2017 harvest would be welcome.

Source: FreshPlaza.com

AUSTRALIA

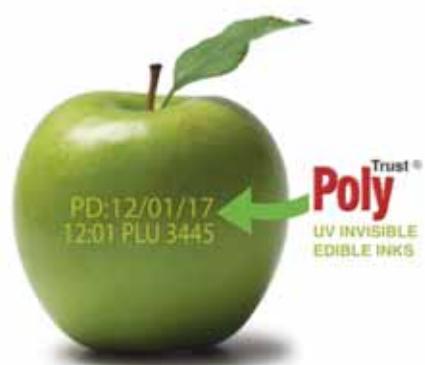
Edible ink for traceability

Digital Ink Technologies, based in Victoria, Australia, has introduced its new POLYtrust edible UV invisible ink as a unique way to label fruits and vegetables. The ink allows the company's printers to use polymer thermal inkjet technology which sticks directly to produce and cannot be rubbed off easily.

The benefit to growers or wholesalers is to print with HACCP-certified edible inks that either be invisible or visible to the consumer. The cost of applying a "Best Before Date" or "Picked Date" or a company logo is negligible.

The consumer benefit is fresher produce with each individual piece of fruit tagged with its own picked date.

Source: FreshPlaza.com



SPONSORED CONTENT

The opportunity with ag plastic waste

There's too much plastic waste making its way into our landfills, and the only way to address the problem is to go back to the basics: reduce, reuse, and recycle

BARRY FRIESEN

Plastic is a key material in the world economy that can be found in virtually everything these days. Worldwide, 322 million metric tons of plastic were produced in 2015, and by 2050, that number could be four times higher.

Canada's agricultural community uses a great deal of plastic. It can be found in bale wrap, greenhouse film, tubing and pipes, pesticide containers, grain bags, silage bags, twine, nursery containers and more. While plastic has become an essential part of modern agriculture, what to do with the material when it's no longer useful is an ongoing challenge.

Historically, discarded agricultural waste has ended up in landfills or been burned or buried, sometimes on farm property. Landfills are difficult to site and expensive to manage and plastic buried in a landfill does not decompose, thus filling up valuable space. Burn barrels and other backyard incineration methods are also problematic because they can release harmful emissions in addition to wasting valuable resources.

Alternatively, recycled plastic can be reused to produce new products using fewer natural resources in the manufacturing process, eliminating emissions and saving landfills.

To help growers better manage their farm waste, CleanFARMS has partnered with agri-retailers and municipalities across the country. We work with more than 1,000 collection sites to

make our programs accessible to growers in every region. The strong demand for CleanFARMS programs demonstrates the commitment of the entire agricultural industry to protecting our environment and preserving our resources for future generations.

Last year alone, more than 5.2 million empty pesticide and fertilizer containers were collected through a CleanFARMS program, and nearly 300,000 empty seed and pesticide bags returned. New technologies in a processing facility put all this plastic waste to good use after it was sorted, shredded and melted into useful materials like farm drainage tile.

CleanFARMS is now also developing a program to collect grain bags in Saskatchewan, along with bale wrap, silage bags and twine in several locations in Manitoba. We're working with our partners to expand these programs to other provinces.

While CleanFARMS plays an important role in protecting the environment by keeping recyclable materials out of landfills and burn piles, the work that we do is possible because of the support of our members and partners who share our vision and long-standing commitment to Canadian farmers.

For more information on how to better manage plastic farm waste, or to find a collection site near you, visit cleanfarms.ca

Barry Friesen is general manager, CleanFARMS

DO YOU RECYCLE YOUR PESTICIDE CONTAINERS?

One in three Canadian farmers don't return their pesticide containers for recycling. Are you one of them?

See how to rinse and recycle your pesticide containers the right way at cleanfarms.ca

THE GROWER

HAPPY BIRTHDAY CANADA



A salute to Canada's horticultural history



Luke Charbonneau, Ontario



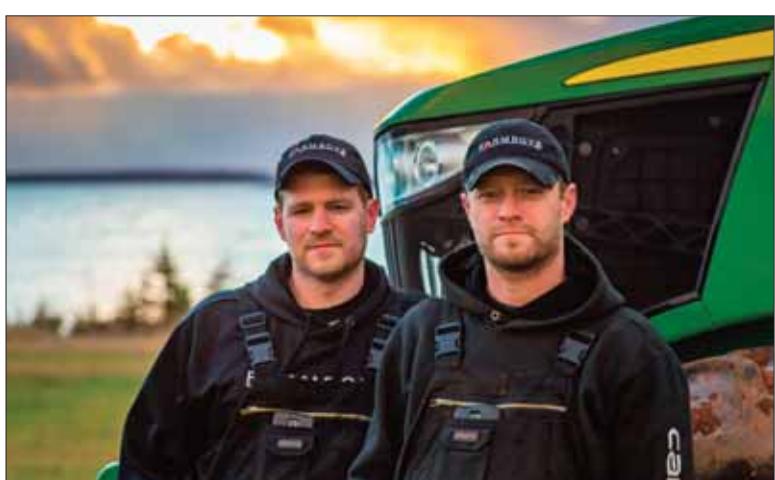
Lloyd Warford, Newfoundland



Peter Swetnam, Nova Scotia



John and Tamara Schenkel and family, New Brunswick



Kyle (L) and Bryan Maynard, Prince Edward Island

KAREN DAVIDSON

Four hundred years ago this month -- July 15, 1617 to be exact -- Louis Hébert arrived in New France with high hopes for his future life on the site of Quebec City. While his official role was apothecary, his passions were for all things agricultural and so over the years, he planted a small apple orchard, vineyard and some grain crops. This was no small feat in the virgin soil. As the story goes, he was denied a request to import a plough, so worried were the leaders that he might distract from the fur trade. And so it was that history recorded these early settlers as "*laboureur à bras*" -- spade farmers.

Hébert's early success proved a beacon for another hearty soul, Olivier Charbonneau who disembarked from a ship further up the St. Lawrence River. This time, in 1659, the landing point was on the island of Montreal. The farming gene has been a dominant one, because ten generations later, Norm Charbonneau is a direct descendant farming fruits and vegetables today near Port Elgin, Ontario.

A remarkable Canadian story of grit, this scene was repeated many times over as immigrants from all nations took a spade or a plough to the new land, often beside the sparkling waters of rivers and lakes. By 1681, the pioneering Charbonneau owned one rifle, four oxen and six cultivated acres of land.

"Those were the days when the Iroquois still conducted raids," Norm Charbonneau reveals from his ancestral records. "Olivier survived the first winter because a fellow farmer had been killed by the Iroquois and he was gifted one half the crop. These were tough times -- especially when you consider that over his lifetime, he lost three wives in childbirth."

By the early 1800s, the Charbonneau descendants were attracted to the fort of Detroit. Not only did the fur trade beckon, but also fine farming land near Pancourt. This is where Norm Charbonneau's grandfather was born -- "a French rogue among Scots."

That heritage site was left behind in 1985 when Norm Charbonneau moved to Port Elgin, on the shores of Lake Huron. This is where he and his son Luke farm 300 acres. About 40 different crops are marketed directly to consumers from an on-farm market. For this Canada day, strawberries will be front and center. His predecessors would be amazed by the

technology: trickle irrigation, day-neutral genetics, GPS-guided tractors.

Charbonneau's story is one of many to be cherished across Canada. Here's a glimpse into some of the pioneering families who have put their own spades into the soil.

Newfoundland

Newfoundland's fledgling cranberry industry is trying to buck low prices for a globally popular superfruit. Thirteen growers formed the Newfoundland Cranberry Cooperative a year ago with hopes of leveraging grant money for a business plan and a more prosperous future.

"Between federal and provincial governments, about \$20 million has been invested, as well as growers' money to kickstart an industry," says Lloyd Warford, the Cooperative's project administrator.

One of the growers is Fabian Power who first started planting in 2010 and now has 25 acres under bog near Botwood. Another 15 acres are in development.

At the turn of the decade, prices of 85 cents per pound encouraged the initiative, however 2016 prices of 12 cents per pound have discouraged the expenditures of inputs. No surprise, then, that 2016 volumes were half of the 1.2 million pounds that the cooperative produced in 2015.

One processor, located at Centreville, Newfoundland, currently cleans, washes and freezes the cranberries. With no other buyers, the growers' cooperative must accept the price offered. Hopes are that a business plan, expected in mid-July, can demonstrate the economics of their own processing plant in the years to come.

Nova Scotia

Nova Scotia is more than apples and grapes. Peter Swetnam and his brother John farm 800 acres of field crops -- corn, soybeans and wheat -- near Centreville with 125 acres of those acres in yellow cooking onions. The crop is marketed through Nova Agri to retailers across the Maritimes. Today, he is one of two Atlantic representatives to the executive of the Canadian Horticultural Council.

As second-generation farmers, they also produce broiler chickens commercially. This was a natural outgrowth of their father Bill's initial stake and formation of the Nova Scotia Turkey Marketing Board in which the Swetnam's got into the turkey business. The

chickens have since replaced the turkeys.

Bill nearly didn't make his mark. It took three times of applying to the Nova Scotia Farm Loan Board before he was granted his loan. Why the capitulation? Peter's father had pointed out a mathematical error in the calculations of their long-term interest rates on loans.

This persistent trait is one inherited from their forebears who arrived by ship from England. The Swetnam's grandfather, Rev. W.J.W. Swetnam survived the Halifax explosion on December 6, 1917 when two ships collided in the city's harbour. One ship was loaded with explosives destined for the battlefields of the First World War. He was standing in the open doorway of his parish, watching the ships burning, when the sudden massive explosion left him standing there with all his clothes ripped off and his house behind him flattened to the ground.

New Brunswick

John and Tamara Schenkel are truly hard workers with a dairy farm near Whitney, New Brunswick and 400 acres of wild blueberries south of the Tabusintac River. The price of quota spurred them to diversify into the horticultural crop back in 2006.

"It used to be that wild blueberries were a low-input, low-management crop but today, higher inputs and high management are required to be successful," says Schenkel. "By doing weed control in the fall and working closely with beekeepers, we are reaping 5,000 pounds of wild blueberries per acre."

Originally, John's parents immigrated from the Netherlands in 1959, bringing a strong work ethic and farming background. Today, Schenkel is chair of the New Brunswick Wild Blueberry Association.

Prince Edward Island

Not far from the crucible of Canada's Confederation, potato farms stretch across Prince Edward Island. Bryan and Kyle Maynard, near Tyne Valley, symbolize the resilience of these multi-generational farmers. Both sides of the family came from dairy heritages, but over time, transitioned to potatoes and cereal crops.

The family history is marked by tragedy. First, their paternal grandfather lost a leg to a potato harvester. Then their own father died suddenly in a farm accident.

HAPPY BIRTHDAY CANADA

A salute to Canada's horticultural history

"In what other industry would a family endure such loss and still want to pledge millions of dollars to stay on the farm and continue the line?" asks Bryan Maynard.

Today, Bryan and Kyle, 33 and 31 respectively, operate 3,000 acres with 1,400 acres of processing-bound potatoes. Since taking over the farm in 2015, their objective is to reduce volume and improve quality.

Passion for the land continues on in Bryan's side photography business: www.farmyardphotos.com.

Quebec

Like many farmers in Quebec, David Lemire's history can be traced back to the mid-1600s. His ancestor Jean Lemire, a master carpenter from Rouen, France, came to be revered for his workmanship in churches as well as a community spokesperson in the area of Cap-Rouge.

Several centuries later, in 2004, descendant David Lemire bought the Ferme Horticole Gagnon farm at Trois-Rivières. Of the 100 acres, 25 acres are in June-bearing and day-neutral strawberries and the remainder is planted to sweet corn and vegetables. His spouse Francine Héroux has taken the reins of the kiosk on the farm and the management of human resources.

Located close to the confluence of the Saint Maurice and St. Lawrence rivers, the farm has access to a pool of local labour and a young and prosperous locavore clientele.

Manitoba

Connery's Riverdale Farm at Portage la Prairie is well-known in Manitoba circles. The 1,000-acre farm produces rotation crops as well as asparagus, broccoli, carrots, onions, squash and U-pick and pre-pick strawberries. What's not so well-known is that the sudden passing of Doug Connery in 2011 triggered a life-changing moment for neice Samantha.

Her uncle had been a larger-than-life force in horticulture, lending his expertise to the labour file for the Canadian Horticultural Council. Having digested the impacts of the family crisis, "Sam" decided to leave Winnipeg and return to the home acreage for a farming career. Today, she has many roles to support her mother, brother Chris, field manager and neighbour Rob, warehouse manager. Those include food safety and overseeing seasonal agricultural workers.

"The biggest challenge of my job is to create a great workplace culture," she says. "We have a diverse mix of Mexicans, Jamaicans and Canadians. We've also had employees from Kenya and Sudan. This 'United Nations' mix of people has taught us a lot of lessons about working together. It's so much easier when you have a work family instead of just co-workers."

Saskatchewan

The Erlandson family came to Canada from Norway by way of Minnesota in the Dirty Thirties. That grit is ingrained today as grandson Dan, his wife Chelsea and his brother Travis operate Spring Creek Gardens at Outlook, Saskatchewan. They are a rare breed in the prairie province farming 225 acres of mixed vegetables.

Back in the '80s, the original grain farm endured tough times with high interest rates and it was the diversification into vegetables that saved the farm.

All these years later, they now specialize in the Brassica family of vegetables and are now trying romaine lettuce and celery. Their output is for sale several days a week at farmers' markets in Saskatoon and Regina. Expanded acreage allows them to market wholesale through the Prairie Fresh Food Cooperative. For their growing and marketing efforts, the Erlandson's were honoured with Saskatchewan's Outstanding Young Farmers Award in 2016.

Alberta

For those outside Alberta, it's a little known fact that many Japanese immigrants arrived in southern Alberta in the late 1800s and early 1900s. Lethbridge, for example, is the site of the Nikka Yuko Japanese Garden and host city to a cultural society which preserves the history of Japanese settlement in southern Alberta.

World War II brought its share of dark chapters in which Japanese labourers were evacuated from the British Columbian coast and brought to Alberta for the duration of the war. From 1941, Mark Miyanaga's grandfather Joe (Yoshihiko) was indentured to sugar beet farmers near Picture Butte, not able to own land until 1949. Fortunately, Joe and his sons John and Robert were able to buy 100 acres in the early 1950s near Taber where they started to grow a wide variety of market garden vegetables as well as potatoes.

Out of that harsh history grew a successful farm

operation passed down to the next generation. Evolving today are the Miyanaga cousins, Jay, Jordan and Mark. As owners of Triple M Farms, they contract 1,800 acres of potatoes to three processors: Cavendish in Lethbridge, McCain Canada in Coaldale and Lamb-Weston in Taber.

Mark Miyanaga says the biggest change has been technology. GPS-directed tractors and irrigation equipment that's controlled by smartphones make it possible to farm large acreages. The size of machinery has evolved from two-row harvesters to some that are self-propelled.

"In 1986, I can remember my uncle running a harvest crew and thinking that 50 loads was a good day," recalls Miyanaga. "Today, we're doing 180 to 190 loads per day."

"I'm optimistic about the future," says Miyanaga. "One of the strengths of the Alberta industry is that we're a bunch of tight-knit growers. Information flows freely, moving toward continually improving the industry."

British Columbia

From the breadbasket of India's Punjab to the fruit basket of the Okanagan Valley, Pinder Dhaliwal's family has come a long way to put down roots. The family's story traces the economic boom and bust times of Canada's economy. His dad arrived in Dunnville, Ontario in 1972 to work on a hay farm, but he was soon beckoned by the lumber mills of British Columbia. Arriving in Penticton, he was hired on the spot.

As an eastern Indian community flourished in the area, talk soon turned to agriculture. Several leased farmland, gaining a toehold in apples and cherries. In the 1980s, that's exactly how the Dhaliwal family bought their acreage near Oliver, paying exorbitant interest rates up to 22 per cent. Through those hard times, Dhaliwal persevered, gaining an economics degree from Simon Fraser University as well as a teaching certificate.

"I met all sorts of first-generation Canadians – Croatians, South Asians – and we all knew what hard work was and the importance of getting an education," recalls Dhaliwal. Today, the family tends to almost 20 acres of fruit. Over the years, he's been active in the BC Fruit Growers' Association and has held the position of vice-president for four years.



David Lemire, Quebec



Left to Right: Sam Connery-Nichol, Kyle Nichol, Beth Connery, Lisa Connery, Chris Connery, Lucas Connery (in Lisa's arms), Manitoba



Chelsea and Dan Erlandson and family, Saskatchewan



Miyanaga Farms, Alberta



Pinder Dhaliwal, British Columbia

Ontario Berry Grower

Ministry of Agriculture,
Food and Rural Affairs

Phytophthora crown rot and red stele of strawberries

MICHAEL CELETTI

The wet conditions experienced last fall and earlier this spring in many regions of Ontario were ideal for infection and development of Phytophthora crown rot and red stele in strawberry crops. Symptoms of these diseases are showing up in many strawberry fields this time of year.

Phytophthora crown rot is caused by the water molds *Phytophthora cactorum*. Strawberry plants infected with Phytophthora crown rot frequently occur in patches of wilted and stunted plants. Leaves of infected plants may appear bluish green initially; however as the disease progresses, leaves on infected plants may develop brown necrotic tissue along the leaf margins and between the veins. The plants wilt very quickly during fruit development or during warm or hot weather conditions when plants are demanding water regardless if the soil contains adequate moisture. Symptoms are often first noticed in low areas of a field or rows where water had accumulated for an extended period after a heavy rain.

Eventually the disease moves along the rows from the patch of initially infected plants. Cutting open the crowns longitudinally with a knife reveals a

reddish dark brown spongy rot inside infected crowns (Figure 1). The reddish brown discolouration may appear at the base, middle or top of the crown. Often roots attached to the infected crown appear black at the point of attachment. The root systems are also frequently discoloured and may have fewer secondary roots.

Red stele is caused by the water mold *Phytophthora fragariae*. It is relatively easy to diagnose red stele by digging up the roots of infected strawberry plants and slicing them longitudinally (Figure 2). The vascular tissue (sometimes called the stele) of infected roots will appear blood red surrounded by white cortex tissue hence the name "red stele." The secondary roots are often pruned significantly giving the root system a "rat tail" appearance.

Both Phytophthora crown rot and red stele pathogens survive as persistent, resistant, resting spores for long periods in soil or infected plant tissue. During wet conditions, the resting spores germinate to produce a spore sack called a sporangium. Under prolonged periods of moist conditions, roots and crowns can become infected if they come in contact with the sporangium. However, when soils become very wet or satu-

rated for a sustained period of time (30 minutes to six hours), the sporangium produce and release many specialized spores called zoospores that have tails which allow them to swim toward and infect the crowns and roots of strawberry plants. Strawberry plants growing in poorly drained fields where standing water occurs after a heavy rain -- or heavy, wet soils -- are at more risk of becoming infected by *Phytophthora* spp. The pathogens can contaminate ponds when run-off from contaminated fields flows into the ponds. Irrigation from contaminated ponds can spread the pathogen to other fields.

Managing Phytophthora crown rot and red stele in strawberries is difficult and requires an integrated approach. Select fields that are well drained with light soils if possible. If well-drained or light soils are not available, plant in raised beds. Avoid planting in fields that had a history of crown rot or red stele. Fumigation prior to planting will also help reduce soil populations. Always plant disease-free transplants to avoid introducing the pathogens into your fields.

There are no fungicides registered for Phytophthora crown rot control in strawberries. However, Aliette WDG (fostetyl-Al) and Ridomil Gold SL (metalaxyl-M) are two very



Figure 1. A reddish dark brown, spongy rot inside a strawberry crown with Phytophthora crown rot. Roots attached to the infected crown appear black at the point of attachment.



Figure 2. The vascular tissue (sometimes called the stele) of Red stele infected roots will appear blood red surrounded by white cortex tissue when cut longitudinally.

effective fungicides registered in Ontario for red stele control in strawberries but not for the control of Phytophthora crown rot. However, both Ridomil Gold and Aliette will help reduce Phytophthora crown rot when treating strawberries to manage red stele. As with any pesticide, always read and follow the product label prior to use. Pay attention to timings. Ridomil Gold 480SL is registered for two applications as a soil drench in the fall for red stele control and should not be

applied in the spring to bearing strawberries.

Aliette WDG must be applied as a foliar spray to actively growing plants and can be applied up to four times in a growing season but has a 30-day pre-harvest interval. For best results, Aliette WDG should be applied well before infection takes place, either in early spring or early fall.

Michael Celetti is OMAFRA plant pathologist for horticultural crops, based in Guelph, Ontario.

Exirel label expanded

Exirel has recently received minor use label expansion (URMULE) registration for control of aphids and the suppression of thrips in strawberries and the control of black vine weevil, obscure root weevil, spotted wing drosophila and Japanese beetle in caneberries in Canada. Exirel was already labeled for use on a number of crops in Canada for control of various insect pests including black vine weevil adults and clay coloured weevil adults in bushberries (CG 13-07B).

For optimum control of spotted wing drosophila, black vine weevil and obscure root weevil, tank mix DuPont Exirel insecticide with Hasteen NT spray adjuvant at an application rate of 0.25% v/v. For optimum control of aphids and thrips apply Hasteen NT spray adjuvant at an application rate of 0.25% v/v or MSO Concentrate with Leci-Tech at an application rate of 0.5% v/v.

It is recommended that a small area be tested to demonstrate safety to fruit and leaves before using in large areas.

For spotted wing drosophila, begin applications when populations are low. DuPont Exirel insecticide targets the adult life stage of spotted wing drosophila. If spotted wing drosophila populations are high, use a registered insecticide with a different mode of action to reduce the pest populations. Apply a subsequent

application of DuPont Exirel insecticide if required.

If thrips populations are high, use a registered insecticide with a different mode of action to reduce thrips populations before applying Dupont Exirel insecticide.

Restrictions and precautions

- For any of the pests listed above, use the high rate under heavy pest pressure.
- Do not make more than four applications per season.
- Do not apply more than once every five days.
- Do not apply less than one day before harvest. Observe a one-day PHI.
- Do not exceed a total of 4.5 litres Dupont Exirel insecticide per ha per season.

Do not tank-mix or make sequential application with Group 11 fungicides, Captan, Maestro, Folpan, Bravo or Echo.

Exirel insecticide is toxic to aquatic organisms, bees and certain beneficial insects and non-target terrestrial plants. DO NOT apply this product to blooming crops or weeds while bees are actively visiting the treatment area. Apply early in the morning or late in the evening when bees are not active. Minimize spray drift to reduce harmful effects on bees in habitats close to the application site. Do not contaminate aquatic habitats



Aphid

when spraying or when cleaning and rinsing spray equipment or containers.

Follow all other precautions and directions for use on the Exirel insecticide label carefully.

For a copy of the new minor use labels contact Erica (Erica.pate@ontario.ca) or your regional supply outlet.

Note: This article is not intended to be an endorsement or recommendation for this particular product, but rather a notice of registration activity.

ON BERRY NEWS

Managing Spotted Wing Drosophila

ERICA PATE

Two insecticides have recently been registered for emergency use on spotted wing drosophila (SWD) on berry crops (crop group 13-07) and stone fruits (crop group 12) in Ontario.

Mako (cypermethrin) Group 3

For sale and use in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador for suppression of Spotted Wing Drosophila on Berry Crop Group 13-07 A, F & G (excluding lowbush blueberries), Grapes and Stone Fruit Crop Groups from June 1, 2017 until November 30, 2017.

Directions for use:

Emergency Use Registrations: Stone fruit (apricot, sweet and sour cherry, nectarine, peach, plum); strawberry, raspberry, blackberry, grapes.

Rate: 150 mL/ha; Use sufficient water for thorough coverage. A small area should be treated

before large areas are sprayed to evaluate crop tolerance.

Max # of Applications/year: 1**Application Interval: N/A****Days before harvest:**

- All crops except hand harvested grapes: two days
- Hand harvested grapes: six days

Re-entry Interval:

- Grapes: 14 days for girdling, six days for hand harvesting, training, tying and leaf pulling.
- All other crops and/or activities: 12 hours

Precautions: Leave a 15 m buffer between the sprayed area and any body of water. Highly toxic to bees.

Malathion 85E Group 1B

For sale and use in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador for the control of Spotted Wing Drosophila on stone fruit and berries from June 1, 2017 until November 30, 2017.

**Directions for use:**

Emergency Use Registrations: Stone fruit (apricot, sweet and sour cherry, nectarine, peach, plum); Berries (strawberry, blueberry, raspberry, currant, gooseberry, blackberry); Grapes. Rate

- Stone fruit: 610-855 mL product/1000L of water
- Strawberry, Blueberry, Raspberry, Currant, Gooseberry, Blackberry: 1000ml product/1000L of water.
- Grape: 880 mL product per 1000L of water.

Use a maximum of 1000L of water per hectare.

Max # of Applications/year:

- Stone Fruit, strawberry, raspberry, currant, gooseberry, blackberry: two
- Blueberry: three
- Grape: one

Application Interval: seven-10 days (Grape N/A)

Days before harvest:

- Stone fruit, strawberry, currant, gooseberry, grape: three days
- Blueberry: two days

- Raspberry, blackberry: one day

Re-entry Interval:

- Grapes: four days for girdling and cane turning, three days for hand harvesting, two days for training, tying and leaf pulling.
- All other crops and/or activities: 12 hours

More information on registered products and on spotted wing drosophila can be found at Ontario.ca/spottedwing.

Erica Pate is fruit crops specialist, Ontario Ministry of Agriculture, Food and Rural Affairs.

ON VEGETABLE NEWS

Stemphylium is the new Botrytis

TRAVIS CRANMER

Stemphylium leaf blight (*Stemphylium vesicarium*) of onion starts as yellow-tan, water-soaked lesions developing into elongated spots. As these spots cover the entire leaves, onions prematurely defoliate thereby reducing the yield and causing the crop to be more susceptible to other pathogens. Stemphylium was first identified in Ontario in 2008 and has since spread throughout the Holland Marsh and other onion growing areas in southwestern Ontario.

Stemphylium leaf blight can sometimes be misdiagnosed as purple blotch (*Alternaria porri*), as they both have very similar symptoms initially. Purple blotch has sunken tan to white lesions with purple centers while Stemphylium tends to have tan lesions without the purple centers.

Stemphylium spores are dispersed by wind. Spore sampling at the Muck Crops Research Station using a Burkard seven-day spore sampler detected an average of 33 spores/m³ in 2015 and seven spores/m³ in 2016. In ideal conditions, leaf spot symptoms occur six days after initial infection. Stemphylium tends to

infect dead tissue or wounds, often as a result of herbicide damage, insect feeding or from extreme weather. Older onion leaves are more susceptible to infection than younger leaves and symptoms are traditionally observed after the plants have reached the three- to four-leaf stage.

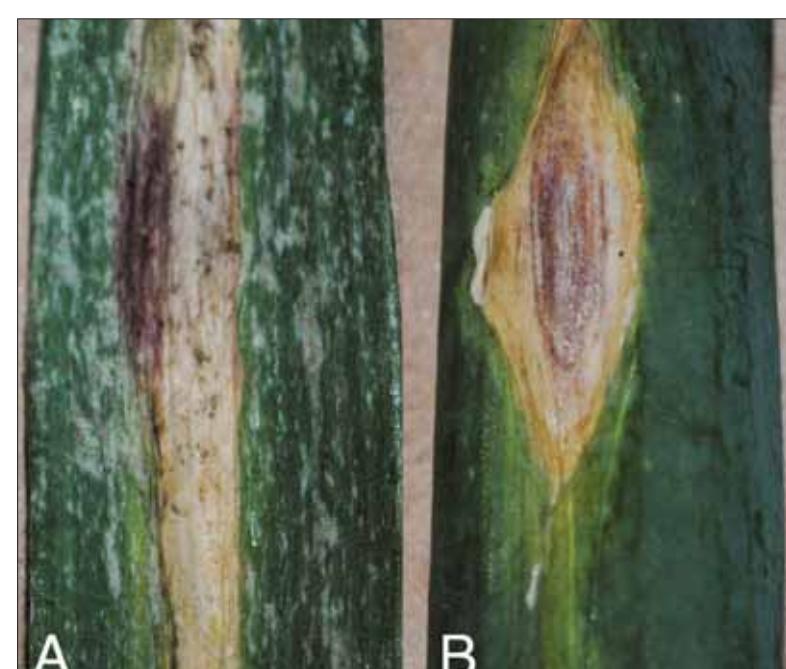
Over the last few years, Botrytis leaf blight (*Botrytis squamosa*) has become less of an issue and has been overtaken by Stemphylium as the most important onion disease -- other than maybe downy mildew. This may be because the fungicides used to target Stemphylium are likely managing Botrytis as well. Since Stemphylium can be so devastating and hard to control, fungicides are now being applied earlier in the season which may be preventing Botrytis to become established.

Botrytis squamosa overwinters as sclerotia in the soil and on crop debris left from the previous year and infects onions in mid-June when temperatures and leaf wetness are favourable for infection. In the Holland Marsh, Stemphylium lesions were first observed on June 29th in 2015 and July 7th in 2016.

The primary method of

management is through foliar fungicides such as Luna Tranquility, Quadris Top and Sercadis. Keep in mind that Sercadis and Luna Tranquility both contain a group 7 fungicide so remember to rotate and do not make sequential applications. The effectiveness of these fungicides in the future depends on the spray programs you choose today. There are already Stemphylium isolates insensitive to several fungicides in New York so resistance is a real and very serious issue with this disease. Remember to rotate fungicide groups with different modes of actions to reduce the possibility of resistance. A protective fungicide is best applied when the onion crop has reached the three-leaf stage, however it may not be necessary in dry years.

Research is currently being conducted at the Muck Crops Research Station to improve forecasting models to identify the optimal timing for commercial growers to achieve good control. BOTCAST disease forecasting model is available in some areas of Ontario to help growers predict the activity of the disease. Warm, wet weather between 18-26°C is most favourable for disease development. Regular field scouting is



still the best method to assess disease levels.

Plant spacing that permits better air movement and irrigation schedules that do not extend leaf wetness periods may be helpful in some areas. Recent work at the Muck Crops Research Station has shown that spores increase two to 72 hours after rainfall with eight hours of leaf wetness to be optimal for the pathogen. Irrigate overnight if possible so by morning the leaves can dry out and you don't prolong that leaf wetness period.

To lower inoculum levels it is crucial to remove or bury culm piles and to bury leaf debris left from the previous year's crop

through deep cultivation. Stemphylium of onion has many hosts including leeks, garlic, asparagus and even European pear. Take the time to rogue out volunteer onions or other Allium species in other crops nearby and remove unnecessary asparagus or pear trees to lower inoculum levels. As with any other foliar disease of onion, it is beneficial to rotate with non-host crops for three years.

Follow ONVegetables.com for up-to-date information about Stemphylium of onions and other vegetable-related news.

Travis Cranmer is OMAFRA vegetable crop specialist.

Impending minimum wage increase



JAN VANDERHOUT
CHAIR, OFVGA

By January 2019, minimum wage for Ontario workers will go up a whopping 32 per cent!

Growers across the province are scratching their heads wondering how and where they will recover such a significant increase on their largest expense item.

It seems that the decision to raise minimum wage so quickly was made without the benefit of an economic impact study. Is this a rash decision made to quickly win some votes? One thing for certain is that this is a decision made without recognizing the cost impact to Ontario farmers and the availability of local food. Perhaps an economic

impact study was done and because there is no justification for this increase it has not been referenced?

Either way, Ontario growers are left holding the bag of a very significant cost increase. To survive we will of course need to find some way to absorb this increase. We will have a hard time to recover the increase out of the marketplace as we compete with products grown in other countries with a much lower input cost structure than ours. In time, perhaps the increase can be applied to consumers but in the short term, it will be difficult to compete with jurisdictions such as Mexico where wage rates are much lower.

Automation could be a possibility if tasks can be automated in a reasonably cost-effective manner. Most farm production labour cannot. There are no robots for harvesting apples, peaches, asparagus, berries, cucumbers, tomatoes or any of the products grown in Ontario. Trimming and pruning of crops must also be done by caring hands. In cases where automation could be applied such as packing lines this will mean the reduction of jobs. This might

help the farm stay competitive but will not be good for the workers who thought they were getting \$3.60 more per hour only to find themselves out of a job. Some growers will look at downsizing their production so that the added labour costs do not suck them into bankruptcy. Again fewer jobs. Depending on the situation some farms will likely switch to less labour-intensive crops such as feed corn or soybeans, reducing the availability of Ontario-grown produce. Fewer jobs and less Ontario produce again.

The most frustrating part is the speed that this has come about. As farm operators we make plans based on the information at hand. Up until the first of June 2017 we were basing our cost projections for the coming years on an increase to minimum wage based on the consumer price index of around two per cent per year. Now we are faced with a huge increase of 23 per cent in six months followed by another nine per cent a year later. How can we adjust that quickly?

It has been stated that the Employment Standards Act will also be reviewed. This could potentially have even bigger

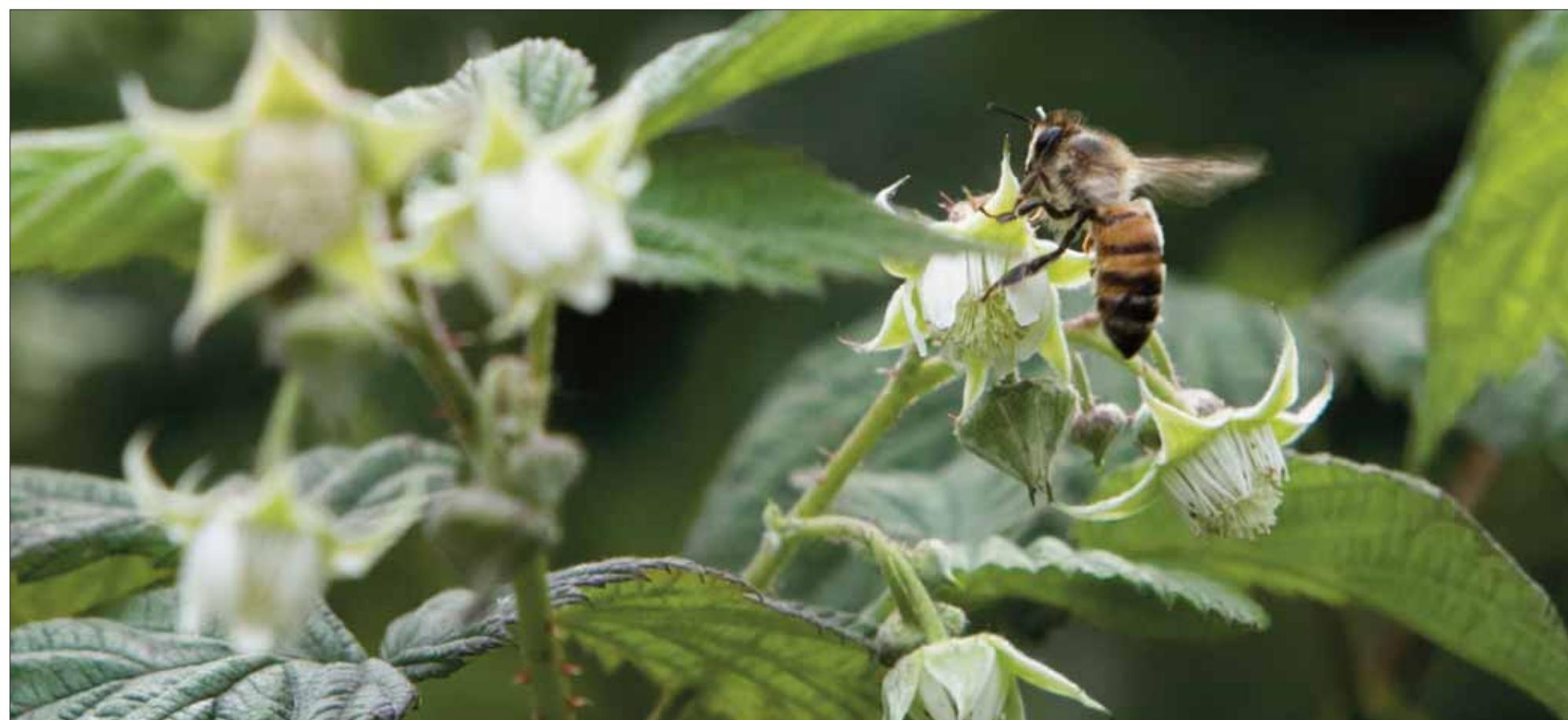
negative impact on Ontario farms. If a 44-hour work week was imposed on us we would be unable to complete critical tasks on the farm. Workers who currently enjoy extended hours of work through busy times would be sent home after meeting their weekly quota for hours. This would cost employers thousands of dollars per year. This is very disappointing for me as well but the reality is that we cannot possibly absorb an overtime expense especially on an increased wage rate. It will be critically important that the nuances of agriculture are considered as the act is reviewed.

There is a significant amount of discussion right now about what growers need. One idea that I hear frequently is possibly assigning an agriculture minimum wage. Currently even though we are exempt, we pay minimum wage rate because we are competing for workers within the local job market. This will not change on January 1st. Farmers' reputations would not benefit from being the lowest wage payers in the province. In a social climate where it is widely believed that raising minimum wage will reduce

poverty, farmers could be misunderstood and vilified by some people for opposing it. We must therefore seek a solution to transition our farm businesses into models that can exist with a higher wage rate. Whatever we ask for must be a concerted effort. We must strive to understand what the best options are before collectively going to government to work out solutions.

An immediate solution must be found to keep Ontario fruit and vegetable growers competitive in the business of supplying locally grown fruits and vegetables. The Ontario Fruit and Vegetable Growers' Association is working diligently through the Labour Issues Coordinating Committee (LICC) along with other agriculture sectors to find strategies to smooth this transition to a significantly higher minimum wage. We will work with government to develop strategies to mitigate the effect a higher minimum wage has on primary agricultural production in Ontario with a goal of keeping "Good Things Growing in Ontario."

WEATHER VANE



Hats off to honeybees. This happy forager was spotted on June 12 pollinating raspberries at Hi-Berry Farm near Port Elgin, Ontario. Anecdotal reports suggest an excellent overwintering rate for bee colonies. Hard statistics are expected from the Canadian Association of Provincial Apiculturists in early July. Photo by Glenn Lowson.

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THE
GROWER

PERSPECTIVE



Must prices drop for "healthy" to sell?



**OWEN ROBERTS
U OF GUELPH**

Some people say their fruit and vegetable consumption is muted because their kitchen skills are lacking. They buy something, get it home, then don't know what to do with it. So into the garbage it goes.

Others say the problem is price. They think fruit and vegetables are more expensive than junk.

Whatever the case, Canadians continue to eat fewer fruits and vegetables than they

should. And it's to our detriment, because there's no question we are missing an opportunity to improve our health. It's an old saw, but diet and exercise (besides not smoking, of course) are still a key to unlocking the door to better health.

How are retailers helping? Well, they know local is where it's at these days, and it seems like we're seeing more local fruits and vegetables being promoted in season. To consumers, local means fresh. For the most part, it also means healthy.

But does healthy sell?

Maybe it depends on price. That's the latest experience in the U.K. It's a crazy market there, ever since Britain voted to leave the E.U. Brexit devalued the pound sterling, and prices typically rose, including the price of imported produce.

But in May Tesco, Britain's biggest supermarket, decided to

take a radically different approach.

In what it calls its "Little Helps to Healthier Living" campaign, it actually dropped prices on more than 200 products it calls healthy, including a number of fruits and vegetables: carrots, pineapples and tomatoes, among them. Very healthy choices, requiring very little preparation. And more economical than ever.

It's also dropped prices on a basket of products it says contains less salt and sugar, and a whopping 65 per cent less saturated fat.

This is working out well for Tesco. In a sector where gains are measured incrementally and by shades of a percentage, its sales of healthy products have actually increased 2.4 per cent. That's huge in the face of a tough domestic economy.

It made me wonder if a similar approach would work here, with a goal of increasing consumption and improving

sales for growers. We market on fresh and local. Usually, the two are intertwined; I think consumers see them as complementary. If it's local, it's fresh.

But if it's fresh, it's not too much of a stretch to position it as healthy, as well, particularly if we're talking about fruit and vegetables.

Would retailers expect growers to help a little with price? I expect so. Can they? That's a big question. Could volume be increased enough to make up the difference? And are you really getting ahead if you sell more but make the same profit?

Likely not in the short run. But something needs to catalyze a change in culture if, overall, consumption is going to increase.

On the producers' end, higher profitability may be realized with less labour and more automation, as explored in the pages of this edition of **The Grower**. We know the many

challenges faced by labour and the creative approaches besides automation that have been pursued to try to compensate for the fact that many Canadians are not interested in working on fruit and vegetable operations.

We also know some approaches that might boost labour availability are not being well received, such as minimum wage hikes, which agriculture thinks will do more harm than good.

This spring I interviewed a fruit grower who is bent on competing with imports with superior local products. His produce is all handpicked. And while that drives up his cost of production, he thinks a well-heeled segment of the market will pay accordingly for fresh, local and healthy.

We'll see if healthy works for him. Meanwhile, cheers to a great growing season.

AUTOMATION

Harvest CROO Robotics rolls out autonomous vehicle

Based in Tampa, Florida, Harvest Croo Robotics is launching its autonomous vehicle which is expected to be picking strawberries next winter.

As part of a National Science Foundation grant, the company is developing software and hardware tools including the vehicle's GPS navigation system, LIDAR technology and other camera and sensor features.

With four-wheel steering, turning movement will be smooth and precise, providing a zero-turning radius for greater maneuverability than a standard tractor. Special leveling hardware and software has been developed and added to allow the vehicle to compensate for varying bed heights.

The vehicle will carry 16

picking robots through the field and span six beds of plants, picking the four middle beds. The Harvest CROO machine is equipped with a dual GPS system to interpolate the position of the platform so that the robots are positioned precisely over the plants.

"Having the machine navigate the fields autonomously is the culmination of years of work and prototyping," said Bob Pitzer, co-founder and CTO of Harvest CROO. "It is very gratifying to see our team effort come to fruition."

Harvest CROO Robotics continues to develop and test the latest technology for agricultural robotics. The proprietary vision system will allow all ripe berries to be harvested from the plants. The



fruit will then be transferred up to the platform level of the machine using a series of conveyors. There, the packing module of the machine will perform a secondary inspection and grade the fruit. Depending on quality, the berry will either be packed into consumer units, diverted to process trays or discarded. The use of this technology will improve the quality of the berries picked,

reduce energy usage and increase strawberry yields.

While fundraising for the project has been ongoing, the current investment round will likely be closed at the end of July, when field testing of the vehicle is completed.

"We will possibly open a new investment round early next year, at a higher valuation," stated Gary Wishnatzki, co-founder. "The

new unit price will reflect the successful deployment of the Alpha Unit, a key milestone."

Harvest CROO (Computerized Robotic Optimized Obtainer) began in 2012 on Wishnatzki's vision of creating a solution to the dwindling labour force in agriculture. For more information, visit www.harvestcroorobotics.com. Source: Harvest CROO Robotics June 12, 2017 news release

LETTER TO THE EDITOR

Growers might benefit from carbon tax

Re: Carbon taxes: enlightened green policy or just another tax?

I received a copy of **The Grower** in the mail yesterday and read the article on carbon tax. I must say that I am continually disappointed by the coverage on this topic. Your story is negative and does not cover how a grower might benefit from the carbon tax, say for example if they switched up to organic farming!

Neither has anyone else's coverage of this topic.

I am an organic apple grower here in Nova Scotia and I do direct marketing. I read your publication, but I find it heavily slanted to conventional farming and the retail trade suppliers. For example your coverage on Roundup would certainly convey a false sense of security considering the mounting opposition to the product in Europe.

You should also consider that more than 70 per cent of new farmers in Canada last year are ecological

farmers and how your publication is planning to fit this new reality or if you simply plan to retire with the current mainstream.

Brian Boates
President, Atlantic Canada Organic Regional Network (ACORN)
Woodville, Nova Scotia

Amazon to buy Whole Foods



PETER CHAPMAN

On June 16, the *New York Times* and other media outlets reported that Amazon.com Inc will buy Whole Foods Market Inc for \$13.7 billion. This is a very interesting development in the food industry. We have been talking about the changes coming to our industry as online shopping grows and this will quicken the pace of change.

What does this mean for suppliers and others in the food industry?

This is a signal that Amazon will be more aggressive in the food segment.

We know Amazon has been trying to sell more food. They see this as a growth opportunity for their business and where food is very consumable, it will add volume to their orders and more regularity to consumers ordering from them. The knowledge they will gain from Whole Foods for procurement, inventory management and selling of fresh foods will be significant.

Nielsen reports online food purchases in North America are less than five per cent, compared to more than 20 per cent in Asia. That is a huge opportunity in front of Amazon. Assuming they pursue it aggressively, sales growth will be delivered for years.

DISPUTE RESOLUTION CORPORATION

Keep written and electronic notes

Q&A: What should I do when I receive a claim from a buyer?

When engaging in a business deal in the produce industry, be sure to keep written records of your communications. That means keep a copy of all of your notes, a record of your emails and any pertinent documents. If arrangements are made over the phone, be sure to confirm details of the conversation in writing by it in a call log or your supplier file.

How long should you keep these records? There are certain records and documents that must be kept for at least two years including (but not limited to): invoices, inspections, sales tickets, purchase orders, and bills of lading.

For other written records pertaining to a deal, they should be kept until the file is settled

If you don't understand online shopping for food, you need to learn. You need to learn faster than you did yesterday.

Distribution for Amazon Fresh will be in more than 450 stores across U.S., Canada and the U.K.

We certainly don't know yet but Amazon could use the Whole Foods stores as distribution points. This will have an immediate impact on existing bricks and mortar food retailers. This will also bring much needed volume into Whole Foods locations. Sales and inventory turns will improve the financial results in these stores.

Amazon growth means less for the rest.

One thing we do know. North Americans will not eat more because Amazon bought Whole Foods. If Amazon sells more after this move, existing food retailers will sell less. Whole Foods was a pioneer and ran into trouble when others began to copy the model. Their financial problems are a big reason they sold out. Assuming Amazon is successful, we will see more new 'non traditional' sellers of food trying to copy their model. In Canada, Loblaw and Walmart are investing in click and collect. Amazon continues to pursue the delivery model. Amazon now has an

option to implement click and collect in more than 450 locations. That will mean less for the rest.

Life for suppliers of Whole Foods might change.

Whole Foods really started as a movement, not a conventional retailer. Certainly, they were in the business to buy and sell while making a profit. They also had their way of doing it and they did make efforts to work with suppliers and even loan them money to get the products they wanted. Amazon is different, bringing a new method of doing business to Whole Foods' suppliers.

Remember it was Amazon who called the leaders of some of the biggest Consumer Packaged Goods food companies to Seattle to tell them to stop selling to Walmart. Perhaps they have more volume but they also have a different philosophy.

Selling food is changing.

The biggest learning for suppliers is that selling food is changing! You could see new opportunities with non-traditional sellers of food starting up. The buying decision for consumers is changing from the store to a computer, tablet or phone and the whole value chain is being disrupted. This is like being in line at a roller coaster!

Acceptance Final need to be Discussed, Understood & Agreed Upon (DUA).

DUA is an acronym you'll want to remember. The party claiming such special agreements will have the burden of proving they were agreed to if the other party objects when disputes arise. If you don't know what all the rules are, you may agree to something that might limit your rights. An arbitrator will look at your notes in the course of the dispute resolution process. Your notes should make it clear what terms have been discussed, agreed and understood between the shipper and the receiver. Stay tuned for more on DUA in a future article.

For more information please call or email the DRC Help Desk at: DRC Help Desk, 613-234-0982, Info@fvdrdc.com

COMING EVENTS 2017

July 5	Ontario Apple Growers Summer Tour, Niagara, ON
July 16-18	International Tree Fruit Association Summer Study Tour, Crowne Plaza Hotel, Grand Rapids, MI
July 17-18	BC Wine Grape Council 18th Annual Enology and Viticulture Conference and Trade Show, Penticton Trade Show and Convention Centre, Penticton, BC
July 17-19	Federal-Provincial-Territorial Agriculture Ministers' Meeting, St. John's, NF
July 19-22	Haskap Days Extravaganza, University of Saskatchewan Campus, Saskatoon, SK To register: http://haskap.ca/haskap-days-2017/
July 25-26	Canadian Horticultural Council Midsummer Apple Meeting and Orchard Tour, Mont Tremblant, QC
July 26	What's Growin' On Vineland Research Farm Open House, Vineland Station, ON 6 pm
July 28-30	PMA Foodservice Conference, Monterey Conference Center, Monterey, CA
August 3	Nova Scotia Fruit Growers' Association Orchard Tour, Kentville, NS
August 3-4	Triggs International Premier Vinifera Lecture Series, Brock University, St. Catharines, ON
Aug 4	AAFC Charlottetown Research Centre Open House and Tour, Harrington, PE
August 8-9	Triggs International Premier Vinifera Lecture Series, BC
Aug 12-13	Carp Garlic Festival, Carp, ON
Aug 12-13	Perth Garlic Festival, Perth, ON
August 16	Peak of the Market's 19th Annual Family Fun Day, Winnipeg, MB
Aug 16	Potato Research Day, Elora Research Station, Elora, ON
August 17	Ontario Potato Field Day, HJV Equipment, Alliston, ON
Aug 17-19	Quebec Produce Marketing Association Convention, Hilton Lac Leamy, Gatineau, QC
August 19	Garlic is Great Festival, Newmarket, ON
August 24	U.S. Apple Outlook and Marketing Conference, The Swissotel Chicago, Chicago, IL
August 27	Canadian Garlic Festival, Ukrainian Seniors Centre, Sudbury, ON
August 27	Eastern Ontario Garlic Festival, Lamoureux Park, Cornwall, ON
August 27	10th Annual Garlic Festival, Abbey Gardens, 12 km east of Carnavon, 12 km west of Haliburton, ON
Sept 2	Verona Garlic Festival, Verona, ON
Sept 9	Ontario Hazelnut Association Grower Trial Site Tour, Farm of Graham Dyer, Port Dover, ON
Sept 9-10	Stratford Garlic Festival, Rotary Complex, Stratford, ON
Sept 10	Ontario Hazelnut Association Grower Trial Site Tour, Farm of Earl Hughson, Uxbridge, ON
Sept 12-14	Canada's Outdoor Farm Show, Woodstock, ON
Sept 17	Toronto Garlic Festival, Artscape Wychwood Barns, Toronto, ON

Understand the impact of discounting your price



PETER CHAPMAN

increase will result in better efficiency and a lower product cost. If you can improve your product cost by 10 per cent and reduce it to .72 per unit then you need to sell 15,384 units to deliver \$2,000 in profit. Now you require a 50 per cent increase in sales to generate the same profit.

The sales lift required to generate the same profit increases exponentially relative to the level of discount. It is too easy to get caught up in the game of lowering prices without understanding the impact on profit.

Make it up somewhere else.

How often have you heard the words "we will have to make it up somewhere else" during a conversation about price discounts? It is a lot tougher than you think.

We will assume you offer the 15 per cent discount and your selling price changes to .85. We will also assume that you get some efficiencies and your product cost reduces to .75 on these products. Your cents per unit profit has decreased to 10 cents. Volume will increase by 75 per cent.

To make up the difference in profit with a rate of return of six per cent, you will need a sales increase of \$4,166 on another item just to get your profit back to a regular week. How will you generate that without another discount?

Discounting prices is a reality so you need to really consider the appropriate level of discount and if you can do it. Work through the math to understand the impact on your business. If you can reduce the level of discount slightly it will have a big impact on your bottom line.

If you have any questions about distribution, please give me a call at (902) 489-2900 or send me an email at pchapman@gpsbusiness.ca. Next month we will talk about the differences between marketing and trade spend and how they can impact your profits.

RETAIL NEWS

Do you order online or still visit the store?

I had the opportunity to visit stores in Ontario, and it is interesting to see how many parking spaces are reserved for shoppers picking up groceries they have ordered online. At Superstore and Walmart, there are several premium parking spaces reserved for online shoppers to wait in their car for the order to be brought out.

Although the overall percentage of food purchased online is still very low in North America, the number continues to grow. According to Nielsen less than

In some cases, a volume

	Normal Price	15% Discount	To Recover
Product Cost	\$0.80	\$0.80	\$0.80
Regular Selling Price	\$1.00	\$0.85	\$0.85
Regular Weekly Volume	10,000 units	10,000 units	40,000 units
Weekly Profit	\$2,000.00	\$500.00	\$2,000.00

Chart 1

	Normal Price	12% Discount	To Recover
Product Cost	\$0.80	\$0.80	\$0.80
Regular Selling Price	\$1.00	\$0.88	\$0.88
Regular Weekly Volume	10,000 units	10,000 units	25,000 units
Weekly Profit	\$2,000.00	\$800.00	\$2,000.00

Chart 2



five per cent of North American shoppers regularly buy food online, however, the number for Asia is 22 per cent. They report the global number to be 14 per cent.

This will mean many things to the food industry as the number of online shoppers rises. Volume going through stores will decline, distribution and packaging will receive a lot of focus and the consumer buying decision will change. As companies producing and selling food evolve to home delivery and packaging becomes more functional than promotional it will impact the entire value chain.

Are you ready? Have you bought food online to understand what consumers are doing and how they do it? Your relationship with consumers will change again as you might lose the ability to communicate through your investments in store and on packaging. Lots to think about!

	Normal Sale	15% Discount
Product Cost	\$0.80	\$0.75
Regular Selling Price	\$1.00	\$0.85
Regular Weekly Volume	10,000 units	17,500 units
Weekly Profit	\$2,000.00	\$1,750.00
Average company return	6%	

Peter Chapman is a retail consultant, professional speaker and the author of *A la Cart-A suppliers' guide to retailer's priorities*. Peter is based in Halifax N.S. where he is the principal at GPS Business Solutions and a partner in SKUfood.com, an online resource for food producers. Peter works with producers and

processors to help them navigate through the retail environment with the ultimate goal to get more of their items in the shopping cart. pchapman@gpsbusiness.ca



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FOCUS: FARMERS' MARKETING

Four tips to upsell in fresh season



KAREN DAVIDSON

Strawberries speak to our Canadian culture. Whether they're fresh, smashed into jam or draped over ice cream, strawberries signal the official start of summer.

Barrie Hill Farms is exactly what everyone imagines a pick-your-own strawberry farm to be. It's really about the rumble of tractor and wagon going to the fields to pick strawberries. It's the quintessential Canadian experience in July.

But the strawberry field season is short after July 1 and what's a farmer to do outside that window. Morris Gervais has built a destination business at Springwater, about 10 kilometers west of Barrie, Ontario, using multiple techniques to upsell fresh produce. As a member of the Ontario Farm Fresh Marketing Association, he's garnered tips over the years from many bus trips to other provinces and states.

"Few of us can compete with California strawberries, but Driscoll's – a major purveyor of strawberries – would never allow consumers to pick in a field," says Gervais. "Centuries ago, we were hunters and gatherers and the field-picking experience gives us a connection with the season."

Here are four marketing tips that can up your game.

Direct your traffic to upselling opportunities. When consumers get off the field

wagons from berry-picking, there is no other way to exit than through the Barrie Hill Farms market. Fencing deliberately funnels traffic through the store where consumers will find freshly dug potatoes, peas in the pod and other seasonal produce.

For those who have children, consumers will find it hard to resist the Farmer Morris sign that begs for a photo against a yardstick. Shareable? Tweetable? You bet.

Light the way. Grocery-style lighting is designed to accentuate the vibrant colours of fruits and vegetables. Gervais has sourced lighting suppliers in the U.S. He's also learned how to space baskets of product for a geometric presentation under the lights.

Sample cooked foods in-store. Let's face it...preparing vegetables can take some work. A local chef is regularly on-hand with fresh creations from seasonal produce. Selling the smell of peppery arugula or roasted vegetables on pizza can inspire more sales. Gervais sources local fiddleheads, wild leeks and garlic scapes to entice more experimentation in the home kitchen.

Offer home replacement meals. Counter-intuitive? Not really, when time-starved consumers crave authenticity in their food ingredients. Barrie Hill Farms has a well-curated freezer section offering chicken pot pies, shepherd's pie and a wide range of comfort foods – all using surplus crops such as



A well-curated freezer section includes Ontario-grown frozen garlic cloves. Photo by Glenn Lowson.

“
Centuries ago, we were hunters and gatherers and the field-picking experience gives us a connection with the season.

~ MORRIS GERVAIS

sweet corn and peas. The farm earned a Premier's Agri-Innovation Award in 2014 for the novelty of its frozen asparagus tips and spears.

The individual quick freeze (IQF) method is very successful with blueberries, but also yields a surprisingly good eating experience with asparagus. Gervais uses a variety that maintains a tight tip at lengths of 8.5 inches, longer than the industry standard of 5.5 inches. These longer

spears result in less trimmed waste and more tips in every package.

Another novelty is frozen Ontario garlic sourced from The Garlic Box in Hensall. The same IQF technique is used to extend the life of garlic. Simply defrost the peeled garlic cloves in your hand and they're ready to use.

Barrie Hill Farms is a short drive from 136,000 consumers, but by no means can these con-

sumers be considered a captive audience. As the city of Barrie encroaches on the farm, Gervais worries about the future. He'd like to transform his seasonal market structure into something permanent but is wary of the time-consuming and expensive building permit process.

That's the next chapter of the story but for now, at six feet plus, Morris Gervais is towering over his current season.

FOCUS: FARMERS' MARKETING

25th anniversary of farmers' market is launchpad for home delivery service

KAREN DAVIDSON

Anniversaries are tricky. Look backwards or look ahead? Kelly Marie Redcliffe, manager of the Wolfville Farmers' Market and her seven members of the board, have made a wise decision for its 25th anniversary: "We are treating all of 2017 as a year of thanks."

Located fortuitously in the heart of Nova Scotia's Annapolis Valley and close to the Acadia University campus, the Wolfville Farmers' Market draws on a town of 4,200 residents and a student population of 3,500. As a food and wine epicenter, Wolfville draws tourists from around the world. Not only is it a summer gathering for Wednesday night market suppers and local entertainment, but it serves as a winter market too – all thanks to a permanent building site. Saturday markets run year-round.

"We transformed a turn-of-the-century apple warehouse into our 9,000 square-foot market home in 2010," says Redcliffe. "It takes so many people with passion and hard work to build success for the community."

What's up for 2017? The Canada Day Cakefest will celebrate various heritages with different groups making cakes in their own tradition. The multi-cultural fabric of Wolfville will be celebrated with cakes from Syria, Albania, India, Asia, Germany, France and so on.

If anyone misses the July 1 event, then the Wednesday market suppers promise a local vibe. About 10 food vendors supply the ingredients for a \$10 meal. Another \$2 buys a salad and artisanal bread. Volunteers help serve the sit-down meal,

complete with plates and cutlery.

"Student volunteers and local farm and food businesses come together; and in this respect, we are a social enterprise," says Redcliffe.

Social media keeps the students well-informed as to menu themes and upcoming entertainment. Rhubarb, for example, was profiled in mid-June on Twitter: @wolffarmmarket.

The most ambitious plans for 2017 are to launch a new website and home delivery service. Called WFM2Go, the service will offer fresh-from-the-farm produce to be delivered in town and at two hubs 20 kilometres and 40 kilometres distant. The first deliveries will be made July 5 at a cost of \$2 to \$3 per order.

"The difference between a Community Shared Agriculture box and this service, is that consumers decide what they want," explains Redcliffe. "Pricing of the ingredients, set by farmer vendors, will be the same as market day."

The vendors will pay 25 per cent of the cost of goods to the Wolfville Farmers' Market for managing the project.

"The pricing reflects where we hope to be in three years," says Redcliffe. "We need to be sustainable."

The Local Food Marketplace software for the project has been sourced from Eugene, Oregon. It offers: customized website and content management system, web and mobile e-commerce and ordering, distribution management, sales and customer service tools, multichannel sales support and robust reporting.

The software has been pressure tested, if you will, by



The permanent structure of the Wolfville Farmers' Market, in a turn-of-the-century apple warehouse, allows year-round sales of produce and artisanal products.

other farm marketers. One testimonial from Pennsylvania says, "(The software) has been a huge improvement to our online farm stand and wholesale businesses. Collecting and distributing orders takes a fraction of the time it used to, and has allowed us to add additional drop-off days!"

What will be interesting to watch is the launch by the Wolfville Farmers' Market – an already well-established brand in the community – and how local consumers respond to a pickup hub instead of the market experience. Interestingly enough, the food hubs will be encouraged to develop their own community programming at the pickup sites.

If the 25th anniversary celebrations are any hint of future success, the Wolfville Farmers' Market is looking ahead to more growth.

Currently, the market earns about \$250,000 each year for its contracted vendors. They hope to increase this by 30 per cent within three years with the WFM2Go platform.



Event programming keeps a market fresh

Even the programming is fresh at the Wolfville Farmers' Market. Take for example the June 10 event called Fizz: A culture convergence of brewed and fermented beverages and fizzy fermented foods. Here's a sampling of what's on offer:

- Benjamin Bridge Winery: Nova 7 and Tidal Bay Cove Kombucha tea
- Mood Tide Farm: rhubarb pickles
- Seven Acres Farm – carrot ginger kraut
- Suprima Farms – cold-pressed sweet apple cider

FOCUS: FARMERS' MARKETING

Marketing success by thinking outside the garlic box

KAREN DAVIDSON

After 20 years of backbreaking work, The Garlic Box is the proverbial overnight success. Jackie and Jim Rowe planted their first acre of garlic in 1996 in Ontario's Perth County.

Come summer harvest, there was a sting. There was no market for the pungent cloves. So they literally put their harvest back into the ground as seed and bought enough time to cast about for marketing ideas.

"These were the pre-equipment, pre-HACCP, pre-Internet days," recalls Jackie Rowe.

"As the garlic industry matures, the food landscape has tightened our focus with specific value-added products that identify more closely with consumer demand. Long standing classics such as The Ultimate Garlic Mashed Potato Seasoning and the Ultimate Garlic Steak Splash continue to be high performers adding to our growth and increased market share."

Ontario-grown garlic is now treasured by consumers, bolstered by the local food movement and a string of summer

garlic festivals. The Rowes were inspired by selling \$300 worth of products at the St. Mary's Street Fair and have gone on to build a processing line with sophisticated products and packaging.

This summer's venture is a return to the fresh product: garlic scapes. In cold-climate garlic, the hardneck species puts up a flower stem. One curly scape per plant must be removed in order for the plant's energy to be redirected to clove development.

"At this time of year, about mid-June, you can hear the unfurling of the whips," says Rowe.

She points out that garlic provides a unique opportunity for double cropping: the scapes and the bulbs. With a two-week window to hand snap the scapes, she suggests that instead of letting them drop to the ground, they should be harvested for a delicacy. A double harvest can earn up to an additional \$1000 per acre.

Unless consumers stumble upon a farmers' market, garlic scapes are difficult to source. But the Rowes are ramping up their sales efforts with a pilot with Metro stores in southwestern Ontario. In the

next few weeks, expect to see garlic scape bundles with eight whips per bundle, with Foodland Ontario logo and recipe directions. Garlic scapes - rich in chlorophyll, vitamin C and provitamin A -- are an excellent complement to summer cooking.

Ever mindful of preserving garlic scapes for other uses, the Rowes dehydrate scapes to include in many of their seasoning blends. The scape can also be frozen and used later to make garlic scape relish. And most innovative of all, garlic scape sea salt is a flavoured salt for the discerning chef.

"We called it Escape," says Rowe. "It's been quite a success, taking the cook from scrambled eggs in the morning to popcorn at night."

In the future? Look for a garlic scape and kale pesto. Partnering with an Ontario kale grower, the Rowes source baby kale leaves to pair with their garlic scapes. The hope is to make these condiments as ubiquitous as ketchup.

The marketing opportunities are endless. Ontario's garlic industry is poised for growth with more than a thousand acres planted this year.



Watch for the pilot project of garlic scapes to be marketed in Metro stores in southwestern Ontario stores. Photos by Glenn Lowson.



Steak splash is one of a dozen or more value-added products that come off the processing line at The Garlic Box, Hensall, Ontario.

A destination farm's mantra: Together is the best place to be

How did Krause Berry Farms & Estate Winery get such a high ranking on TripAdvisor? Let's start with a waffle breakfast on Father's Day, all-day pancakes for Canada Day and a butterfly release on July 8. Those are just a few reasons why it's in fifth place out of 50 things to do in Langley, British Columbia.

It's small wonder that the farm feels like a hotel without the sleep-over. Alf Krause is the farmer, but it's Sandee Krause who brings a background of guest service in the travel industry. The result? It's been a working destination farm since 1974, with enough food entertainment and education to last a day.

The 200 acres of strawberries, blueberries, vegetables and more recently an estate winery, is the underpinning for an added-value enterprise that employs 200 at the height of the season.

"We're really proud of our staff," says Sandee

Krause. "Many are long-time employees and we feel good that university students come here to work to fund their education."

Over the 43-year history of the farm, Krause says the secret to its growth has been authenticity. "Alf and I are very much about caring for the land and the crop," says Krause.

Making a farm into an on-farm market welcoming thousands of guests is an entirely different proposition. So popular is the venue that a full-time events coordinator is on-site to customize events for clients. One of those events is the September 10 Beautiful Feast of Fields, which attracts chefs and vintners from the Lower Mainland. Tickets? \$100 per person.

Sandee Krause's ideas often take a twist from conventional practice. Instead of a drop-off area for kids to play, parents are encouraged to play with them in

what is now called the Fresh Family Fun Field.

"Over the last 10 years every time we thought of what we could do, it just wasn't us. We're strawberry growers and all about food, so just filling an area with random blow-up activities and games kept missing the mark. One day last year, we came across a strawberry shape and colour jumping pillow. That passed through my filter of who we are and we set upon building the field. We filled it with all things that are about us: food, education and a new way to participate and 'play' with your food experience!"

The ideas keep germinating. This year, a garden bar will be launched to serve freshly juiced vegetables straight from the farm.

If you can't visit in person, go to: www.krauseberryfarms.com



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MINOR USE



CRAIG'S COMMENTS

Hall of Fame heroes



CRAIG HUNTER
OFVGA

At the recent Ontario Agricultural Hall of Fame induction ceremonies, the attendees were challenged to define what made a 'Hero' in their minds. Each person was asked to share his/her version with a neighbour. Given there were more than 150 people present, it was surprising that so many could agree on some simple phrases or words of description. Maybe we all take it for granted that all of us know and respect the same folks that we personally think of as heroes. Wouldn't it be great to assemble one giant list of the Heroes of Ontario Agriculture (or in any other province)? The Ontario Hall of Fame rightfully recognizes more than 240 people who have made extraordinary contributions to Ontario Agriculture, but on local levels there are so many more!

My idea of a hero includes someone who 'just does it' without any fanfare, seeking no recognition for themselves, always self-effacing, and truly doing 'it' because in their mind's eye it needed doing. In that broad category I would include most of the leaders of our Agricultural Organizations. These are usually thankless jobs with many others just hiding behind the bushes, sniping at them. These folks don't really need the job -- they usually have farms and families they are 'neglecting' while doing their volunteer work. Most of these folks are not looking for the rewards (if there were any) that come their way. They also have

difficulty in stepping aside when their term is over because of their desire to make sure that nothing gets missed or dropped when they are gone. I bet all of you can think of a dozen that fit that bill as a hero from your experience!

Then there are the ones who strive to create a better environment for the betterment of the whole industry, and the public at large. These innovators are willing to use parts of their farming operation to demonstrate the value of farming in a somewhat different way -- at their own cost as that land is lost from production. This group includes the pioneers who chose to summer-fallow millions of acres in the west to show others how to conserve water during the drought of the dirty '30s. They saved their soil and their moisture, and managed to have crops when others had none. In the '70s, Ontario had new pioneers who adopted minimum tillage or zero tillage to save their soil. They also kept eroded soil out of streams and lakes, thus benefitting all of society. Today these are considered part of 'normal' farming practices but at the time they took big risks of ridicule from neighbours who doubted their sanity. Others planted windbreaks, established grassed waterways, and used cover crops after harvest to keep soil in place. All of these folks are heroes in my mind, and virtually none of them get the recognition they deserved then or now for what their sacrifices have done for the Ontario environment.

We have been more than just lucky to have the many folks who have been leaders of our Junior Farmer and 4-H clubs across Ontario (and all of Canada). Most of you were likely a member of one of those clubs in your youth. (Or wished you had been.) I am willing to bet that you thought of your club leader as a hero, too. These men and women took the time to pass along many life skills that you still unconsciously use

My idea of a hero includes someone who 'just does it' without any fanfare, seeking no recognition for themselves, always self-effacing, and truly doing 'it' because in their mind's eye it needed doing.

today and every day. When you got taught the right way to show a calf for the fall fair, or the way to lay out and sew a complicated dress you were proud to wear later on, I am quite sure your pride was bursting, and that you really thanked that volunteer who showed you how. I see evidence of how many clubs existed in the day when I look at the spoon rack and count the number of club spoons my wife has. No doubt the ribbons of multiple show successes still hang in many a barn today. None of these would be possible if that local hero had not given of their time and expertise. How many of these folks have been given the recognition they deserve?

Ontario has been fortunate to have had some provincially, nationally, and internationally recognized 'extension' experts in many disciplines of agriculture who have passed along their knowledge to our farmers. These people have not only provided the means for individuals to improve their farming methods -- they taught the next generations of staff to try to emulate how to do so. These experts are heroes who have allowed our growers to farm better, to farm smarter, and to not only keep abreast of world-wide developments, but to ride the crest at the front of these changes. It is without doubt that our agricultural position in the world today is at least due in part to their work, their dedication, and their willingness to not only teach what they know but to maintain a lifelong desire to keep learning so they had fresh knowledge to share. This is part of my definition of a hero. Someone who does not rest on their

laurels, but keeps going -- sometimes at a personal cost to them that we cannot see.

I know that there is a risk in making a hero out of a politician. They usually get all the blame when things are not perfect and very little credit when they 'fix' things behind the scenes and good programs prevail. Then too, they offered themselves up to run when it is always easier for others to carp at any/every issue from unelected safety. Most of our agricultural politicians left a farm behind to accept the challenge. In a thankless job, the successful politician survives because while they may have left the farm, they have the best interests of farmers at heart. I can only imagine how tough it is to fight in cabinet for an agricultural priority in the face of competing (financial) interests of every other minister. Where would we be without marketing legislation achieved at great risk and cost in the day? Where would we be without the safety nets? Where would we be without the support for crop protection, for plant breeding, for our labour programs, and many more? All of this has come about because we had political support. The often thankless hours outside the House come at a cost to these folks as well. In my mind, the ones who achieved these programs deserve to be considered heroes.

I saved researchers for the end. Not because they do not rank top in my list of heroes, but because research underpins the success of all the others above. The life of many researchers does not start at 8 AM nor end at 5PM. It is a life-long commitment -- 24/7 for

many of them. It has been my great good fortune in my career to have been based at two great research stations, and I have met with researchers from almost every research station across Canada at one time or another. The last hurrahs of the group who started out in the 1930s came at the start of my career. These were great men, but I only latterly realized to what extent that was true. They gained knowledge the hard way, with hundreds of plots, poor equipment (much of it made by themselves), and very long hours. They studied not only current problems, but looked beyond the curve to what was coming to try to forestall what pessimists called the inevitable. We all owe them a lot for their efforts, and for instilling their values in succeeding generations of researchers. Although the ranks of researchers are slimmer today, we still need to think of them as heroes, for our future depends upon what they can learn and pass along to us.

For those who were at the recent inductions, you will recognize that these few, amongst many others, are attributes that apply amply to just these new inductees. I actually worked on the same staff with three of them, and knew of the fourth by reputation.

I challenge readers to seek out ways to recognize their own heroes, before the memory of their contributions passes with the years.

Congratulations to Bob Lang, the late Arthur Loughton, Jack Riddle, and the late 'Prof' J.C. Steckley- the 2017 inductees to The Ontario Agricultural Hall of Fame.

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GARLIC PRODUCTION

The benefits of removing the garlic scape

TRAVIS CRANMER

The wild ancestors of today's garlic, *Allium sativum*, originated thousands of years ago in what is believed to be garlic's center of origin, Uzbekistan and Turkmenistan. Garlic spread across the globe as it became a popular vegetable, spice, and medicinal plant. The varieties of cultivars we have today were each selected for favourable traits, whether it was the spiciness of the cloves, tolerance to drought or the average size and number of cloves in a cluster.

Garlic has been reproduced clonally—by the separation of cloves—for hundreds if not thousands of years. Scapes, the leafless flowering stem rising directly from a bulb seen in hardneck garlic, was removed to deter the plant from sinking energy into the bulbils and instead to divert the energy into the cloves. As a result, flower production is greatly reduced or even absent in some cultivars

and most garlic clones are sterile.

It was not until the 1980s that male fertile varieties were confirmed, and the few varieties that were fertile had a large variation in flower morphology, timing, stigma position as well as the number of flowers. True seed garlic can be produced by crossing these varieties and research is being conducted to develop new breeding lines.

In Ontario, the cultivars planted are sterile and the scapes are generally removed sometime in June. Research conducted by John Zandstra at the University of Guelph Ridgetown Campus has shown that the timing of scape removal directly influences the resulting yield of the crop and average size of the bulb. These results indicate that it is advantageous to remove the scapes as soon as possible to reduce any negative impact on yield with a potential yield increase of 20 to 30 per cent or more when removed by hand. However, this yield improvement is not always true



Figure 1. Garlic scape

if a sickle bar mower running above the crop is used to remove the scape.

Sickle bar mowers greatly reduce the amount of labour that is required for scape removal, but it comes with a cost. Often leaves are cut in the scape removal process and by removing only one leaf, bulb

sizes were reduced by 13 per cent and the yield was reduced by an average of 17.5 per cent. Yield was greatly impacted as the number of leaves cut during mowing increased. If the top two leaves were cut, the yield was reduced by approximately 25 per cent. For more information on garlic production

and other vegetable news follow [ONVegetables.com](#).

Travis Cranmer is OMAFRA vegetable crops specialist based in Guelph, Ontario.

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