

AgriSuccess

A photograph of two men in red polo shirts working at a desk. One man is seated and writing on a document, while the other stands behind him, looking on. They are in an office setting with a window in the background.

FRESH START
FOR QUEBEC **DAIRY FARM**



FCC Drive Away Hunger

Join the drive in our community

Nearly 860,000 Canadians will need a food bank this month. Over a third will be children. Bring a food or cash donation to the FCC office nearest you, or donate some of the proceeds from your field, bin, livestock or greenhouse, by October 13. Join the drive.

Thanks to our partners

PLATINUM



NATIONAL

Parrish & Heimbecker Limited
BroadGrain Commodities Inc.
Nutrigroupe

Windset Farms™
South West Terminal Ltd.

Co-op
Ray-Mont Logistics

FCCDriveAwayHunger.ca



AgriSuccess

With pride in agriculture and a positive yet realistic outlook, AgriSuccess is dedicated to helping Canadian producers advance their management practices. Each edition aspires to present content that is:

- engaging
- motivational
- innovative
- actionable

Est. 2004, Edition 77

Editor, Kevin Hursh

Original photography by
HuszarVisuals.ca

Photography and articles may be reproduced with permission. Please contact us at agrisuccess@fcc-fac.ca.

Cette publication est également offerte en français. Consultez fac.ca/agrisucces.

The editors and journalists who contribute to AgriSuccess attempt to provide accurate and useful information and analysis. However, the editors and FCC cannot and do not guarantee the accuracy of the information contained in this journal and the editors and FCC assume no responsibility for any actions or decisions taken by any reader of this journal based on the information provided.

Subscribe for free: fcc.ca/AgriSuccess

-  @FCCagriculture
-  Farm Credit Canada
-  Farm Credit Canada
-  FCCTVonline
-  FCCEdge

FCCExpress 

Stay informed with Canada's agriculture business news sent right to your inbox: fcc.ca/Express

FEATURES

9

Worker shortage puts spotlight on creative hiring

Recruiting for today's agricultural jobs requires a different way of thinking.



PRODUCER PROFILE

Fresh start for Quebec dairy farm

For Pier-Luc and Roger Massicotte, a departure from the family succession plan sparked new opportunity in dairy genetics.

COLUMNS

3

YOUR MONEY

Hedge your U.S. commodity prices

Eliminate unpredictable exchange rate fluctuations from your profitability equation.

8

GAME CHANGERS

Plant proteins: a value-added opportunity

As evidenced by major new investments in Manitoba and Saskatchewan, the fastest growth in food processing is coming from plant protein extraction.

14

CASE STUDY

It all happened so fast...

When Tom died unexpectedly, with no farm succession plan, his son Steve was thrown into turmoil.

16

ASK AN EXPERT

Cost savings you may not have considered

Hear from three producers with very different approaches to out-of-the-ordinary ways to save money.

18

ECONOMIC INSIGHTS

3 reasons behind Bank of Canada increase

Borrowing costs will climb in the second half of 2017 as the outlook for the Canadian economy improves.

19

TECHNOLOGY

Making artificial intelligence a reality for agriculture

With AI, machines are gaining the ability to make decisions based on past experience.



Family first or farm first?

The vast majority of Canadian farms are family farms, a source of great pride and also a source of great strength and resilience for the industry. It's also an ongoing balancing act. Does the family come first or does the farm come first?

Most of us would probably say family matters most, but actions speak louder than words. I still remember being disappointed in my last year of high school when I was the only kid without family in attendance at the graduation dance. My family came to the ceremony, but left after the banquet because it was the middle of seeding.

There were many other farm kids in the small graduating class, but their families prioritized graduation a bit differently.

Most of us would probably say family matters most, but actions speak louder than words.

Over the years, I've no doubt disappointed my kids from time to time when farm work and other work has taken priority over family activities. Communication within the family is important so there's a better understanding of why particular choices need to be made. Still, tough choices abound.

In bygone years, sons and daughters were assumed to be part of the farm labour force from an early age. These days, that isn't automatic. In some families, the kids are highly involved. In other families, the kids may pursue entirely different interests.

The September long weekend is harvest time for many farms across the country. If the farm has teenage kids, are they helping with harvest or are they busy with sports or leisure activities with their friends? Do the kids feel part of the farm or do they resent the farm?

Times are changing and there are no right or wrong answers for family involvement in farm operations. Just as with work-life balance, farm and family is also a balancing act.

As always, we welcome all your feedback and story ideas. Email kevin@hursh.ca or tweet @kevinhursh1. ■

KEVIN HURSH, EDITOR / Kevin is a consulting agrologist, journalist and editor based in Saskatoon, Sask. He also operates a grain farm near Cabri, Sask., growing a wide array of crops. hursh.ca

CONTRIBUTORS

KIERAN BRETT / Kieran is an Alberta-based writer who's been covering agriculture-related topics, from production to finance to marketing, since 1989.

PETER GREDIG / Peter has a background in agricultural communications and is a partner in mobile app development company AgNition Inc. He farms near London, Ont.

LORNE McCLINTON / A writer, journalist and photographer, Lorne divides his time between his office in Quebec and his Saskatchewan grain farm.

NICOLAS MESLY / Nicolas is a reporter, photographer and agrologist specializing in agri-food and environmental issues. He has received more than 30 awards from Canadian press associations.

LILIAN SCHAER / Lilian is a professional writer and editor based near Guelph, Ont., providing freelance communications services across the agriculture industry.

Hedge your U.S. commodity prices

BY LORNE McCLINTON

The Canada-U.S. dollar exchange rate is one of the factors determining the profitability of your farm. Currency markets are so volatile every bit of national or international news can impact the exchange rate and, therefore, your bottom line. Hedging tools can eliminate these unpredictable fluctuations from your profitability equation, but few farmers are taking advantage of them.

Three years ago, Brian Hildebrand, a diversified grain producer from Foremost, Alta., started taking out currency options with his financial institution to hedge his U.S. sales after deciding he needed to find better ways to manage how and when he was converting his sales into Canadian dollars. Now Hildebrand locks in his exchange rate for all his crops priced in U.S. dollars.

“Wheat prices (for example) are set on the Minneapolis or Kansas City exchanges, so even if you sell your crop to a Canadian buyer for Canadian dollars, you have some currency risk,” Hildebrand explains. “There can be a two or three per cent currency fluctuation in very short order.”

“A large portion of the commodities that Canadian farmers produce are hedged through the Chicago Mercantile Exchange or CME,” says Anil Aggarwal, a foreign exchange dealer with EncoreFX in Ottawa. “This creates a disconnect because whether you’re selling your product in Canada or the United States, you’re fixing the price based on the U.S. dollar. This creates currency risk.”

If you only price in a slight profit margin in the spring based on a 72-cent dollar, you might have a problem if the dollar rose back to 75 cents by the time you delivered in the fall. Your wheat, corn or cattle would be selling for four per cent less than you expected.

“Doing nothing leaves you totally exposed to fluctuations in the spot market at the time of your sale,” Aggarwal says. “Sometimes you win, sometimes



“Even if you sell your crop to a Canadian buyer for Canadian dollars, you have some currency risk.”

you lose. However, there are different ways to manage this risk. Options and forward contracts, for example, allow you to lock in a rate for a set period of time.”

These types of contracts can be fully customized for amounts and dates, Aggarwal says. You could take out one that would lock in a 72-cent dollar for 100 per cent of your contracted sale on your delivery date if you wanted to completely offset your currency risk, or one could offset 60 per cent of the amount to allow for participation in favourable market movements.

“Hedging your dollar is just another level of risk management,” Hildebrand says. “The first step is recognizing the risk you’re facing. After that, it’s really no different than hedging wheat, cattle or any other commodity.” ■

FRESH START

FOR QUEBEC **DAIRY FARM**

BY NICOLAS MESLY





“Had I known
thirty years ago
how the story
would unfold,
my strategy
would have
been different.”

“I can go into any barn and, in one glance, pick out the best cows,” Pier-Luc Massicotte admits. It’s true the 28-year-old has a keen eye: heifer sales from a \$4,200 cow in his herd have earned him some \$250,000. His passion for genetics started in 2009, and today he manages an elite herd of 118 lactating cows that produce an average 12,400 kilograms per cow – one-third higher than the national average.

When we met at the office of Massicotte Holstein in Champlain, Que., a small village situated on the north shore of the St. Lawrence, Pier-Luc described his passion for genetics and farming as his father, Roger Massicotte – former President of Holstein Quebec – stood by, beaming with pride. Due to recent growth in the Canadian dairy market and quota availability, the demand for good cows is growing rapidly. Stock sales represent 30 per cent of the income for the young father-son company that was born when Roger split from the parent company, Ferme Paul Massicotte & Fils and its subsidiary, Massibec.

Business has been part of the Massicotte DNA since they settled in the region five generations ago. Pier-Luc’s grandfather and Roger’s dad, Paul Massicotte, founded the farm in 1984, bringing together his four sons and their families. The farm diversified so that 70 per cent of revenues are generated by food production and processing items like coleslaw and homemade pies that are sold in the province’s supermarkets. But with the next generation looking to join the business, they had to find ways to make succession part of their plans.

Pier-Luc had been groomed for this from the cradle. In 2008, at age 19, he completed a dairy production diploma (DVS) at the École d’agriculture de Nicolet. Then, to gain experience, the young man left home to work for nine months at Morsan Farms, a 1,500-cow operation in Alberta. However, in spring 2009, when Roger presented to the board of directors the idea of integrating Pier-Luc into the family farm, their reaction was like a slap in his face.

“My two younger brothers told me there was no room for Pier-Luc, unless I gave him my share. I stood up... I was abandoning ship,” recounts Roger, emotion clearly showing in his voice.

Starting fresh

At 46, Roger decided to start over, taking a gamble on his experience and his son’s youthful energy and enthusiasm. At the time, the new venture – Massicotte Holstein Inc. – was just a name on paper. He needed quota, animals, land, a barn and construction permits. And he wanted to have it up and running by early 2010. Meanwhile, the negotiations around separating from the parent company were proving difficult and painful.

In the end, Roger received compensation for 20 per cent of his shares: 25 cows, 24 heifers, 27 kilograms of butterfat quota and a portion of the 100 hectares of land situated less than a kilometre from the original business.

No margin for error

“I had assets of \$1 million, and requested \$3.5 million to finance my business plan,” Roger says. The plan outlined the decision to invest in production assets: quota and land only, as the land area did not justify investing in machinery. All the work – sowing, spreading manure, harvesting – would have to be contracted out, including hay to feed the cows.

“Two out of three banking institutions laughed at us... Farm Credit Canada had faith in us,” says Maryse Carrée, Pier-Luc’s mother. With financing in hand, father and son visited a dozen or so farmers in the province to purchase cows and form their new herd. “That was the best part of this entire process,” Pier-Luc says.

The cows would be housed in a tie stall barn instead of free stalls – free stalls cost twice as much due to the required investments in automated milking systems. Investing in a costly total mixed ration system was not on the table either. The Massicottes prefer distributing hay by hand from large square bales, and using a small automated system to distribute feed. “The machinery that gets the most use around here consists of two forks,” Maryse says.



A high debt to production ratio left no margin for error. Fast-forward seven years, and that ratio has been lowered. Since then, they have acquired 80 kilograms of quota, 50 cows, 80 heifers, 15 hectares of land, and built a building for the animals. Two other projects are currently on the table, say the Massicottes: doubling the capacity of the existing barn and buying another farm. The secret to their success? Produce as much milk as possible while keeping production cost as low as possible.

Implement transition strategy early

In Roger’s eyes, refusing to integrate Pier-Luc into the family business broke an unwritten family rule that the daily management is done based on the understanding that the business will be passed down from generation to generation.

“Had I known thirty years ago how the story would unfold, my strategy would have been different,” he says.

With Roger’s recent appointment as vice-president of Agropur, the third-largest dairy processor in Canada with nearly \$6 billion in sales in 2016, he has increasingly less time to oversee the company. Yet he knows it’s in good hands – and the two are already strategizing how to bring Pier-Luc’s son, Thomas, on board, believing he already shows he will have that same entrepreneurial spark. ■



Financing you can build a dream on

Ask about the new Young Farmer Loan

- Qualify for up to \$1 million
- Special interest rate options
- No loan processing fees

fcc.ca/YoungFarmerLoan



Farm Credit Canada
Advancing the business of agriculture

Canada



Plant proteins: a value-added opportunity

BY KEVIN HURSH



The growing market for plant-based protein is changing the agricultural landscape.

Late last year, a \$75-million pea fractionation plant was announced for Moose Jaw, Sask. A few months later, a \$400-million pea processing plant was announced for Portage la Prairie, Man.

The Moose Jaw plant is being built by Canadian Protein Innovation with investment from a German agribusiness. The Portage la Prairie facility involves a family firm from France called Roquette. The company says it will be the largest facility in the world dedicated to pea processing.

“It’s unprecedented to see a \$400-million investment in food processing,” says Gord Bacon, president of Pulse Canada. He says additional announcements are anticipated, with the investments showing the enormous interest that has emerged around plant protein.

“Consumers equate protein as desirable,” Bacon notes. “The wave is driven by demand for high-protein foods, and the new pulse interest is driven by allergen concerns, functionality and clean labels.”

A clean label means an ingredient list that consumers can pronounce and

ingredients that sound naturally derived. Big food companies are scrambling to remove artificial preservatives and ingredients that consumers see as highly processed.

A great deal of work has gone into plant-based protein for many decades. Depending on the country, to achieve a protein claim on food labels a concentrated form of protein is often required when the serving size is small. The food science behind it all is complicated with different food functionality from different particle sizes.

Protein isolates come from many different crop and livestock sources. The yellow peas that will be used in the newly announced plants in Saskatchewan and Manitoba are non-GMO, in abundant supply and a relatively low price for the protein that can be extracted.

Proponents such as Dennis McKnight, president of The Innovators Inc. out of Vancouver, believe Canada has the potential to become a world leader in plant-based proteins and specialty food ingredients. Speaking last April to the Global Crops Symposium in Calgary, McKnight said this is a value-added opportunity that complements our

Canada has the potential to become a world leader in plant-based proteins.

production and export of commodity pulses, grains and oilseeds.

The technology continues to advance with major investors becoming involved and a high level of research and development. Many highly skilled jobs are being created.

When you think of food processing, what automatically comes to mind is meat packing, cheese, yogurt, flour milling and pasta production. The fastest growth in food processing is actually in plant-based proteins and specialty food ingredients.

Food companies are responding to consumer preferences and the benefits will accrue all the way along the value chain, creating additional domestic demand for Canadian crops. ■

 Follow Kevin: @kevinhursh1

Worker shortage puts spotlight on creative hiring

BY KIERAN BRETT

Canadian farms are crying out for people to keep their businesses going and, hopefully, growing. Consider these hiring tips from producers who've fought the battle.

It's no secret that workers – temporary or permanent – are in short supply in agriculture. Despite having posted strong growth in recent years, Canadian agriculture often struggles to match people with positions.

How dire is the worker shortage? The Canadian Agricultural Human Resource Council (CAHRC), supported by the Conference Board of Canada, recently completed an agricultural labour supply and demand forecast model. This report identified that 26,400 jobs went unfilled in Canada's agriculture sector in 2014, costing the sector \$1.5 billion in lost revenues, or 2.7 per cent of product sales. The report forecast that agriculture's labour gap will explode by 2025, leaving the sector 113,800 workers short.

Why is it so hard to hire good folks? Start with the fact that the agriculture industry can be highly seasonal in its need for workers. Most agriculture jobs are in rural areas, while most Canadians live in the city. A decline in rural populations over recent decades has also depleted what used to be a handy labour pool for farm employers.

Changing the way we look for agriculture workers

Recruiting for agriculture today requires a different way of thinking. Some Canadian producers will need to start targeting workers who are only interested in working part of the year or partnering with employers who have offsetting seasonal patterns. Overall the great opportunities and good wages to be found in agriculture need to be promoted.





5 RESOURCES TO HELP YOU FILL THAT POSITION

- 1 The Canadian Agricultural Human Resource Council developed an Agri HR Toolkit to help producers meet agriculture's unique hiring needs at cahrc-ccrha.ca/resources.
- 2 **AgCareers.com** connects employers and candidates in Canadian and international markets to meet the growing demand for a skilled labour force in agriculture.
- 3 Place a job ad, or visit the job board, on **AgCallHR.com** online portal. This company also provides recruiting services for the Canadian agriculture industry.
- 4 **AgriStaffing.com** specializes in recruitment for Canadian agribusiness, and has a special listing section for students looking for part-time or summer employment.
- 5 WorkHorse Consulting (**WorkHorseHub.ca**) offers an online platform for both agricultural workers and those seeking employment in agriculture across many sectors of the industry.

One company taking these kinds of strategies to heart is Kasko Cattle Co. Ltd. in Coaldale, Alta. According to Nicole Stratychuk, Kasko's human resources manager, employers need to strike a balance between hiring those with experience versus newcomers with a willingness to learn. Some of Kasko's positions, like pen riders, need experienced candidates. Other positions in the feedlot or processing areas do not. A hard-working person with a good attitude would be welcomed and trained.

"Sometimes, when recruiting, we hear people say they don't have the applicable skills, but what we're really looking for is a good work ethic," Stratychuk says. "Some of the feedlot and processing skills that we need, we can teach."

Stratychuk explains that Kasko's biggest hurdle may be a lack of public awareness in agriculture as a career option, or those who count themselves out due to not having any on-farm experience. For this reason, Kasko places a strong emphasis on educating the public on opportunities in agriculture and promotes agriculture as a place where people can find full-time, well-paying positions and learn new skills at the same time.

Stratychuk notes that Kasko stays connected to the local community by attending local job fairs, presenting at local schools or welcoming school kids to their location. She's found that when you reach out and educate people about agriculture, it opens doors.

While agricultural experience is a plus for any farm job, and a prerequisite for some, Stratychuk believes casting a wider net makes good business sense.

"The kids who have grown up on a farm may not necessarily come back to the farm once their schooling or interests take them elsewhere," she says. "The biggest thing is not to exclude people who don't have farm

experience. If we only recruit people who have lived on a farm, we will really limit ourselves."

Don't change the seasonal worker, change the seasonal work

Paul Doef, owner of Doef's Greenhouses near Lacombe, Alta., had a different challenge when it came to finding workers for his 11-acre greenhouse operation. The highly seasonal nature of the commercial greenhouse business meant he was often re-hiring or re-training new team members after a winter break.

Doef tackled it as a production opportunity rather than a people problem. He changed his business infrastructure to include high-tech lights so the greenhouse could create consistent, year-round production. Doef's seasonal labour headaches disappeared.

"Now we can use the same crew all year," he says. "It's a huge advantage to us to be able to offer our employees year-round employment. There's no need to shut down production for a break only to later find our previous staff people, or train new staff."

Other hiring strategies are used by Doef to adjust for staff vacations or busier production periods. For those times, he spreads the word by calling on existing staff for referrals or by posting on local community job boards. When he's really in a pinch for workers, he turns to other area greenhouses to borrow workers.

"We're competitors in a sense," Doef says, "but at the same time, I know what it feels like to look at a crop that's starting to get a little over-grown, or be behind starting your work week. We call on each other, and the employees are usually happy for the extra money."

Sell the lifestyle, not just the job

Portia MacDonald-Dewhirst, executive director of CAHRC, explains that although

Canadian producers are feeling the labour pinch now, the growth of the agriculture industry has resulted in a wide range of opportunities for workers.

“The sky is the limit for this industry,” she says. “It all comes down to having enough workers to ensure businesses can meet their production targets, or expand their operation to meet new business demands as the industry grows.”

In MacDonald-Dewhirst’s view, the industry must focus on communicating why agriculture is such a great place to work. She points to trends that spell renewed interest in agriculture. These

include the local food movement and the development of the so-called gig economy, in which many workers cherish short-term work assignments.

While earlier generations tended to love permanent, full-time jobs with a singular career trajectory, more people today want something that’s flexible, seasonal and requires no long-term commitment.

This trend holds for young people entering the workforce, for Canadians already in the workforce and even baby boomers who may want a different experience as they mature or approach their retirement years.

“Research is clear that people are experiencing more change in career history than ever before, and people are looking for something new and different,” MacDonald-Dewhirst notes. “That can work to our advantage in this industry. We need to ensure that people know the agriculture and food industry is open for business, is hiring, and is a really interesting place to work.” ■

TEMPORARY FOREIGN WORKERS PROGRAM: **FAST FACT**

For many farm operations, worker shortages continue to bring headaches. The federal government’s Temporary Foreign Worker Program (TFWP) remains a mainstay in a tight labour market when the Canadian agriculture and food industries can’t fill their human resources needs domestically. TFWP is jointly managed by Human Resources and Skills Development Canada and Citizenship and Immigration Canada, and helps employers hire foreign nationals for temporary work.

Is the TFWP right for your farm or business? Use this checklist to explore some of the requirements. Under the program, employers must:

- ☑ be actively engaged in the business, and be providing a good or service related to the job offer made to the temporary foreign worker and may be required to make efforts to hire Canadians and permanent residents before offering a job to a temporary foreign worker
- ☑ pay for the temporary foreign worker’s round-trip transportation costs (to and from their country of permanent residence) and, if required, provide no-cost transportation to and from the job site
- ☑ provide suitable and affordable housing, either on-site or off-site
- ☑ pay for the temporary foreign worker’s private health insurance, and ensure coverage by the provincial or territorial workplace safety insurance provider, where required by law
- ☑ provide temporary foreign workers with the same wages and benefits as those provided to Canadian and permanent resident employees working in the same occupation

Enter the search term **TFWP** at **Canada.ca** for more.



STAYING SAFE DURING HARVEST

FARM EQUIPMENT CAN TAKE YOUR LIFE

The leading cause of fatal agriculture accidents is farm equipment: run-overs (18%), rollovers (18%), and people being pinned or struck by equipment (9%).

- ☒ Stay alert
- ☒ Follow safety protocols
- ☒ Watch out for children
- ☒ Keep your cell phone charged

Source: Canadian Agricultural Injury Reporting (cair-sbac.ca)

TREND

REVOLUTION AT RETAIL

E-commerce is changing the way we shop for groceries. Walmart and Loblaws' **click and collect services** let you buy online and use the store only as a pick-up point.



Online sales are expected to reach **\$3.6 billion** by 2019.

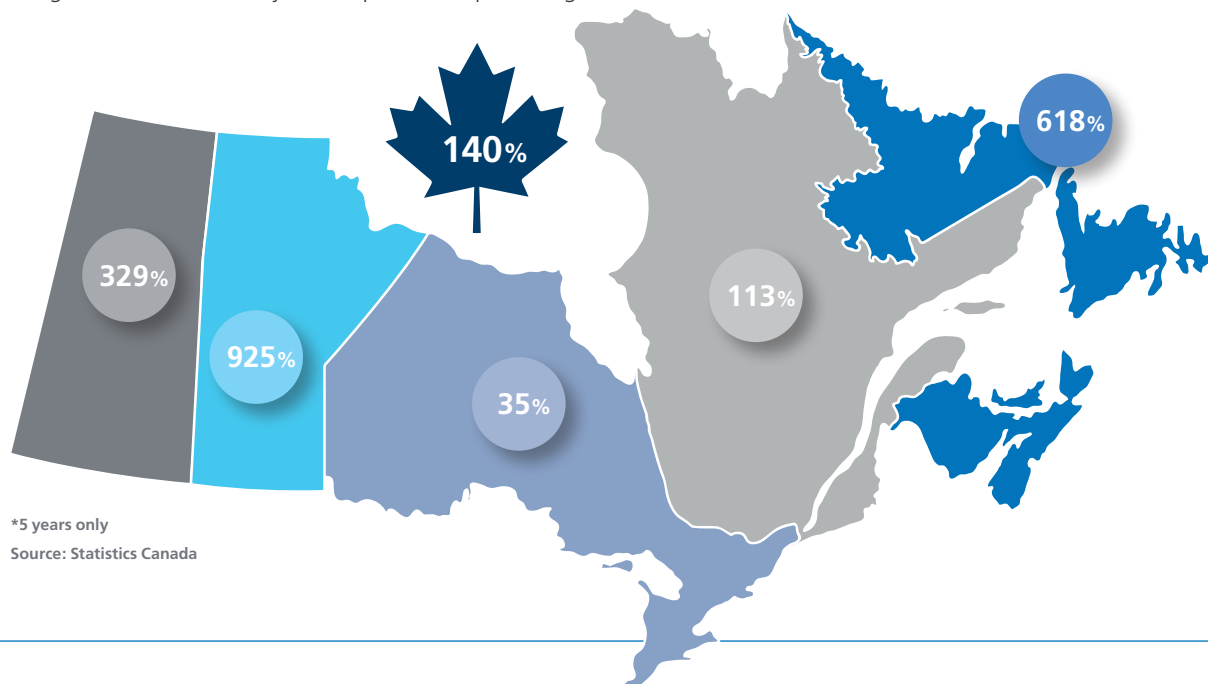
Source: Business.FinancialPost.com



SOYBEAN ACREAGE GROWTH

Who leads the growth? According to Statistics Canada 2017 seeded acreage estimates, Manitoba and the Atlantic region lead Canada's soybean expansion in percentage terms.

- **Canada**
2007: 2,900,000 AC
2017: 6,955,600 AC
- **Atlantic**
2007: 11,000 AC
2017: 79,000 AC
- **Quebec**
2007: 434,900 AC
2017: 926,600 AC
- **Ontario**
2007: 2,240,000 AC
2017: 3,020,000 AC
- **Manitoba**
2007: 215,000 AC
2017: 2,200,000 AC
- **Saskatchewan***
2013: 170,000 AC
2017: 730,000 AC



MAKING MONEY WITH MANAGEMENT

Canadian farm businesses in the **top 25 per cent** are **significantly more profitable** than those in the bottom 25 per cent. Where do you fit? The Agricultural Management Institute has a tool to help you find out how your farm is doing at **Scorecard**. TakeaNewApproach.ca.

Top 3 ways to build management success

- ✓ Continuous learning
- ✓ Accurate financial data
- ✓ Help from business advisors

IN YOUR WORDS

IF I KNEW THEN...

What advice would you give **your younger self** at the start of your agricultural career?

Here's what you said on social media...

"Surround yourself with a strong team of people who understand your goals and can hold you accountable – your lender, nutritionist, agronomist, or fellow farmers."

"Be prepared to fail. Failing is OK. Everyone fails sometimes."

"Debt doesn't have to be a bad word. Have a business plan, seek outside experts, and make sure everything cash flows. Do not feel guilty about making money."

"Look after yourself – mind, body and spirit. Farming can be consuming and things can sneak up on you to challenge your health."

"Take a business course!"

Some comments edited for clarity

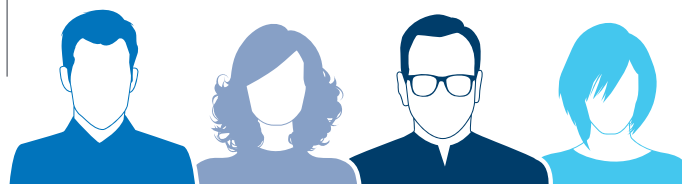


WHAT'S THE BUZZ IN THE GREENHOUSE?

Did you know... bumblebees are brought into the greenhouse to pollinate tomato and pepper vines?

Studies suggest seven to 15 colonies are needed per hectare of greenhouse tomatoes – that's about **2,000 bee trips per hectare per day!**

Source: Seeds.ca/pollination; OGVG.com



 | CASE STUDY

IT ALL HAPPENED SO FAST...

The following fictional case study, created by BDO Canada, illustrates how the absence of a succession plan can throw a farm into turmoil when the unexpected happens.

Tom was feeling good about the upcoming harvest. The equipment was ready, the crops looked excellent and having his son, Steve, involved took a lot of the pressure off.

Like many young farm boys, Steve had taken advantage of the lucrative job offerings available in the oil patch. He had always been interested in the grain operation and talked about building a cow-calf herd when he started farming. But the “one year” sabbatical away from the farm to make some good money in the oil field turned into five years. Now 29, Steve had been back at the farm for the past two years after the oil patch jobs had dried up.

It was going well. Time away made both Tom and Steve appreciate the opportunity to work together and take things up a notch on the farm. Tom was 60 and it was time to find out where Steve stood and build a plan for both their futures.

It didn't happen.

Tom had a massive heart attack about a week before harvest. There was a history of heart disease in Tom's family, but he took care of himself and there had been no sign of trouble. The ambulance got Tom to the hospital but he passed away shortly after.

The next week was a blur, but the crop had to come off and Steve welcomed the work. He had plenty of offers for help and the job got done.

The next week was a blur, but the crop had to come off and Steve welcomed the work. He had plenty of offers for help and the job got done.



Steve felt some anger over it all – why hadn't Dad told him about all this? Why hadn't he asked more questions?

It was post-harvest when the realities hit home. There was no succession plan. Nothing. Steve had an older brother, Bill, who lived in town. He was not into farming and their relationship wasn't great. Their mother Elaine had already expressed a desire to move to town – she struggled emotionally being at the farm by herself. Steve's wife, Karen, had a good job in town and wasn't sure she wanted to move out to the farm. It was just too much, too fast – for everyone.

There had been plenty of talk about Steve coming home to farm eventually, but there had been no discussion about what would happen if Tom passed. Steve was overwhelmed. He didn't know much about the financials for the farm and it turned out Tom's will was 15 years old and the lawyer who had created it was long gone. Tom had kept things close to the vest.

Steve knew he needed to get a handle on where the estate stood. He had a good accountant, knew the banker and found a reputable, ag-savvy lawyer. After meeting with all three, Steve began the daunting task of sorting through his dad's filing cabinets and farm office. He quickly discovered that Tom had kept every piece of mail and scrap of paper over his 40-year farming career. Although the reams of paperwork and file folders never did reveal the password to Tom's computer.

Days spent pouring through the farm records slowly revealed a shocking financial reality. Tom had been speculating on investments outside the farm operation including cotton, gold, oil and foreign currencies. Sizeable losses led to a growing personal line of credit with a different bank.

Steve also discovered a folder labelled "Bill's loan," which contained copies of cancelled cheques, big ones, to his brother Bill starting 12 years ago and ending abruptly seven years later. This revelation explained a lot – Bill's rare appearances at family functions in recent years, a failed business venture, and strained relations with Dad. It also left a lot of questions. Did Elaine know about it? And had any of it been repaid?

Eventually Steve was able to work through the "to-do" list assigned by the accountant, the banker and the lawyer. This included getting the land and equipment appraised, identifying all debts, filing claims on life insurance, and getting the bookkeeping done for the year.

Steve's priorities were to take care of his mom and help her through the loss. He also needed to have some tough discussions with his brother. Steve was ready to move forward and run the farm and, financially, he was not in a bad place. However, with Tom's outstanding personal line of credit, a sizable mortgage not protected by life insurance, questionable off-farm investments and the significant outflow of cash to Bill over the years, Elaine was not as financially secure as she should have been.

Steve felt some anger over it all – why hadn't Dad told him about all this? Why hadn't he asked more questions?

With income taxes payable at the end of April, the need to have a cropping plan in place for the upcoming season, his mom struggling to cope emotionally, Bill providing no assistance and his own future in limbo, Steve faced a tough start as a full-time farmer. After all the work and stress, the family still had to map out a true succession plan, because everything had simply been transferred to Elaine. If only they had started the discussions sooner...

Read Part 2 of this case study in the November edition of AgriSuccess. ■

BDO Canada LLP is a national accounting and advisory firm serving producers from offices across Canada.

 @BDOCanada_Ag | BDO.ca

Cost savings you may not have considered

Q What out-of-the-ordinary cost-saving measures are you using on your farm?



CHRIS VAN DEN HEUVEL
Fireblade Holsteins Ltd.
Port Hood, N.S.

Our local agriculture federation has a machinery co-op. It's especially useful for smaller farms that might need particular pieces of equipment for just a few days or weeks out of the year. You get the use of a relatively new piece of equipment at an affordable price.

About 40 pieces of equipment are available through the co-op: round baler, fertilizer spreader, manure spreader, blades, backhoes, round bale tubers, no-till seeder, hay rakes, etc. We take the anticipated ownership period of each piece of equipment and estimate usage, repairs and salvage value to come up with a rental fee.

Some rents are per day and some are per acre, whatever makes sense. Local equipment dealers have been very helpful with the program and help with the costing.

Each farmer in the co-op is responsible for a few pieces of equipment, taking care of maintenance and repairs and

“This answer may seem unconventional, but our main method of reducing costs is to spend more money up front to grow corn rather than other less expensive feed crops.”

acting as the contact person for the others in the co-op who want to rent those pieces. Billing is done through the federation office.

Access to equipment is generally first-come, first-serve, but the membership is very good at sharing. Camaraderie and a willingness to co-operate are really the keys to making the whole thing work.



GREG DEVRIES

Cedar Line Greenhouses and
Truly Green Farms
Dresden and Chatham, Ont.

.....

We have a family-owned greenhouse operation at Dresden, growing 16 acres of bell peppers, and in 2012 we became part of a group of investors that started Truly Green at Chatham. That operation is currently 45 acres of greenhouse tomatoes, with the full build-out being 90 acres.

The easy answer on cost-saving is that we have a relationship with Greenfield Ethanol at Chatham to get their waste CO₂, and we'll soon get their waste heat as well. That makes a tremendous difference in the economics.

The less-sexy answer is that we have two professional accountants with a lot of experience on staff to run financial models. I had never before realized the full value of that skill set.

For example, a waste heat project only goes ahead if you have numbers that allow good decisions. It's also important to run a sensitivity analysis to show financial projections if some of the underlying assumptions were to change.

One of our best opportunities is in value added packaging, but you need to do the math to know the pricing points that make it work. Based on experience, we have a pretty good idea on what we need to charge, but financial modelling gives us a lot more confidence.



CRAIG FERENCE

Double F Farms
Kirriemuir, Alta., and Biggar, Sask.

.....

We run a diverse agricultural operation consisting of cow-calf, feedlot and grain, as well as custom work. The home farm and feedlot are located in east central Alberta, near Kirriemuir, and we have another property at Biggar, Sask.

This answer may seem unconventional, but our main method of reducing costs is to spend more money up front to grow corn rather than other less expensive feed crops. Because of the growth we can achieve, the cost per tonne of production is less and, more importantly, the cost per day for an overwintering cow is substantially less.

Corn is a crop that responds to inputs. We spend the money to grow a big crop and we've had good success with it over the last four or five years as a way to reduce costs.

Rather than turning it into silage or grazing the standing crop, we use a combination of the two. When the cobs are at about 30 per cent moisture, we strip them off the standing crop and put them through a silage cutter. We call it earlage. The harvesting machine is a corn header, but it's attached to a silage maker rather than a combine.

Stripping the cobs locks in the sugars within the standing residue, and that residue becomes higher quality grazing for an extended period of time as compared to a crop that matures naturally.

While growing corn has a much higher cost per acre compared to alternate feed sources, our cost per day for an overwintered cow has gone down dramatically, roughly half of what the cost was with other feed sources. ■

3 reasons behind Bank of Canada interest rate increase

In July, the Bank of Canada raised its key interest rate 25 basis points, as the markets had largely anticipated. The bank will continue to assess the evolution of the Canadian economy and inflation to determine future adjustments. While borrowing costs remain historically low, it's a good time to pause and analyze your financial strategies, especially as related to fixed vs. variable rates.

After nearly seven years of low interest rates, the Bank of Canada (BofC) increased its key benchmark rate on July 12, 2017. Three main factors played into the interest rate increase.

1 INFLATION IS EXPECTED TO INCREASE IN THE NEXT 18 MONTHS

While inflation is low (1.4 per cent in the second quarter of 2017), the BofC forecasts it will pick up and return closer to the bank's target of 2.0 per cent by the middle of 2018. Inflation forecasts say a lot about future paths of interest rates, with higher projected inflation meaning higher rates.

2 THE ECONOMY HAS LARGELY RECOVERED FROM LOW OIL PRICES

Crude oil prices remain low, and the Canadian economy has definitely made adjustments to this new reality. The 2015 rate cuts helped remove some excess capacity in the economy. But unemployment has now declined and business investment rebounded. Canadian crude oil production is expected to increase in 2017 and 2018.

3 ECONOMIC GROWTH IS IMPROVING

Canadian GDP growth has been strong, and the BofC July 2017 forecasts indicate the economy will grow by 2.8 per cent in 2017 and 2.0 per cent in 2018.

What does this mean for the loonie?

The Canadian dollar averaged US\$0.749 in the first half of 2017, and we expect it will average slightly above US\$0.75 for the remainder of the year. Appreciation during spring and early summer was the result of the rate increase by the BofC, with the loonie increasing to US\$0.78 following the July 12 interest rate announcement.

Borrowing costs will climb in the second half of 2017

Messages to the effect that economic conditions warrant higher interest rates in the near future have already increased interest rates in financial markets. This is likely to translate into slightly higher borrowing costs that will, however, trend up at a relatively slow pace. ■

FCC AG ECONOMICS

Get regular updates and unique perspectives on national and global economic events that impact Canadian agriculture.

fcc.ca/AgEconomics



Making artificial intelligence a reality for agriculture

BY PETER GREDIG

There are many definitions of artificial intelligence (AI), but in plain terms the concept describes how a computer or machine can emulate a human by processing information and data and generate a response or action to get a job done properly.

Artificial intelligence has been anticipated by science fiction for decades. But the availability of enormous volumes of data and high speed computing is helping make AI a mainstream technology.

Examples include voice recognition software, customer service bots and autonomous cars.

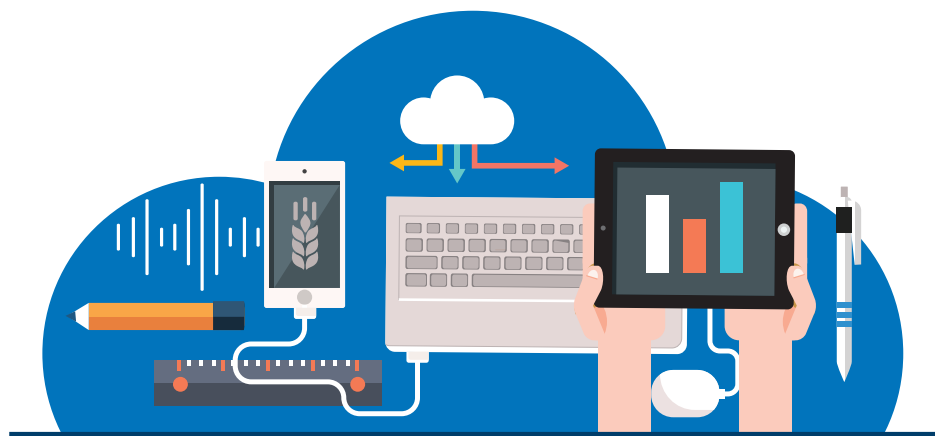
If you ask Siri if you need an umbrella today, she recognizes that you are asking if it's going to rain.

When you use a customer support chat forum to get help with a product, a new router for example, you are almost certainly communicating with a chatbot that uses AI software to respond to your query.

An autonomous car is using GPS data, information coming from numerous sensors on the vehicle and driving protocols programmed into the car to make the appropriate driving decisions.

In all these examples, AI software is accessing data and generating a response that has traditionally been done by humans.

This word “decision” really helps to define how AI is poised to impact agriculture. Just



The availability of enormous volumes of data and high speed computing is helping make AI a mainstream technology.

as it's helping doctors make better diagnoses for cancer patients by accessing huge banks of data and previous outcomes, the potential is for AI to assist or automate specific management decisions currently made by farmers.

Supercomputers that can process millions (yes, millions) of equations per second could allow all manner of data from Internet-connected field sensors, weather stations, drones, etc., to be combined with seed product characteristics, crop and input prices, and more to predict or automate decisions relating to which seed to plant, when to plant it, the optimal fertilizer rate, irrigation decisions, and so on.

To date, most artificial intelligence is really driven by the formulas or algorithms developed and installed by humans. For example, if the variables indicate that irrigation should be turned on, the software

will make it so. We've built the formula that enables the software to generate a decision.

The next stage of artificial intelligence is sometimes referred to as machine learning. Instead of relying on defined programming (if the data is x, the output is y), the concept of machine learning is to program the software to recognize patterns so it can learn how to respond appropriately, getting better and better with each iteration. This is a crude simulation of how the human brain actually works.

Will artificial intelligence replace the knowledge and intuition that farmers have always relied on to help manage their farms? Probably not – but it will complement and challenge how decisions are made, especially as our ability to generate and collect all manner of data continues to expand. ■



Rural lenders **join forces**

What happens when you can see opportunities to grow and improve your operation, and all that's missing is the right financing? You talk to your financial institution. But sometimes those opportunities exceed one organization's abilities, and that's when co-operation becomes key.

It's convenient

You already have solid relationships where you have your deposit and chequing accounts, pay your bills, and go for revolving credit. When you add FCC to the mix, you keep your existing relationships and add a partner who's as committed to your success as you are.

Grant McGrath, president of GMAG Holdings Ltd. of Saskatoon, Sask., is a long-time customer of Prairie Centre Credit Union in Rosetown, Sask., who found nothing but support when he approached their office with an investment opportunity.

"My relationship with my credit union is key and I wanted to keep it," he says. "I just laid it all out for them; the opportunity and my vision. They asked how I would feel if they brought in FCC. Right away I was on board."

It's easy

With a common customer for both lenders to focus on, things tend to run smoothly. Deals get done "with great efficiency," according to Grant, and paperwork is kept to a minimum.

"I think FCC values align nicely with ours," says Blair Wingert, chief credit officer at Prairie Centre. "We both have a focus on the agriculture sector."

Blair and Kendra Mueller, FCC senior relationship manager, worked with Grant to build the financing package he needed.

"Both organizations are deeply rooted in the farming community," Grant says, "so they have a finger on the pulse of the area and know what's going on." He's quite sure it came as no surprise that he was interested in solidifying his majority position in Western Tractor as well as positioning GMAG for future growth when the

opportunity arose. "When your lender's part of the agricultural community, you don't need to explain yourself."

It works

Everyone wins when one organization has a customer base to serve and the other can provide needed capital.


"We're able to grow our lending in the region, and the credit union remains the face of day-to-day financial services for customers," Kendra explains.

Although not yet a common occurrence, this type of arrangement is becoming more popular among financial institutions in many rural communities.

"Producers and agriculture operators benefit knowing there's a partnership they can count on," Blair says. "This deal has opened the lines of communication for future opportunities."

"We love working together with banks or credit unions," Kendra says. "It's a great boost for the community and the industry."

And Grant? "I'm thrilled with what the future is, and the partners here with me," he says. ■



Save dollars
and make
sense

With accounting software built for agriculture

Keep your business on track and on budget with AgExpert Analyst – do everything from basic bookkeeping to GST returns, inventory management, payroll, forecasts, automated or customized reports, and more.

fccsoftware.ca | 1-800-667-7893



Farm Credit Canada
Advancing the business of agriculture

Canada





“If we talk about what we’re doing, **people will understand how their food is grown** and why we grow it the way we do.”

Pattie Ganske, Advocate
Former Owner, Ag Retail

Be somebody who **does something**.
Be an **advocate**.

Learn more at **AgMoreThanEver.ca**.



Agriculture
more than ever

For subscription changes call 1-888-332-3301

Return undeliverable copies to:

Farm Credit Canada
1800 Hamilton Street
Regina, SK S4P 4L3

**Publications Mail Agreement
No.40069177**