





YOUNG FARMER PROFILE

Entrepreneurial spirit powers 14 family enterprises

The Berthiaume family, located in the Beauce region just south of Quebec City, has developed a corporate structure encompassing more than a dozen enterprises.

FEATURES

10

How to counteract the looming phosphorus deficiency

Over the long term, P fertilizer rates need to match the amount being removed by crops – and that's more than most farmers have been applying.



14

Soybeans continue to march west

Ontario's history with soybeans appears poised to repeat itself on the Prairies.



IN EVERY ISSUE

2

YOUR MONEY

Get your ducks in a row for a loan application

Being prepared and realistic will increase your success when negotiating a new loan.

8

TECHNOLOGY

Set rules for workplace smartphone use

It's a great tool, but it can also be a major on-the-job distraction.

17

ASK AN EXPERT

Protect your farm from internal fraud

Carrie Hall of Ernst & Young LLP advises that family businesses are not immune to internal fraud from employees and family members.

20

SAFETY ON THE FARM

Personal stories help bring Ag Safety Week to life

Held in mid-March since 1986, the annual weeklong campaign features a mix of live and online activities that highlight farm safety according to a particular theme.



Editor, Kevin Hursh

Original photography by GregHuszarPhotography.com Photography and articles may be reproduced with permission. Please contact us at 306-780-3278.

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



FCCTVonline



Farm Credit Canada



Get free ag e-news every week, right to your inbox. fcc.ca/Express

From the Editor



Because I sometimes write articles and columns about farmland prices and land rental rates, I regularly get emails and calls from urban-based landlords wondering if they are receiving a fair land rental rate for their agricultural land.

Other than owning some land, these people have little or no recent connection to agriculture. Usually, this is land they have inherited and often it's being leased to a distant relative.

A typical call goes something like this: "I have land near (insert name of community). Can you tell me what cash rents are in that area? I've only been getting *x* an acre."

First of all, unlike land prices, there's very little publicly available information on land rental rates from one area to the next. Second, rent is highly dependent on the quality of the land, the crops that are being grown and how many producers in the area are anxious to expand their land base.

But all too often, the land rent quoted in these exchanges seems low, and in some cases it's painfully clear that the renter has been getting a very good deal. If you are a renter in this situation, maybe you're just counting your lucky stars and hoping the landlord won't realize they're being under-compensated. If there are family connections, maybe you assume the landlord doesn't mind. Or perhaps you tell yourself that the landlord is wealthy and doesn't really care what he or she is earning from the land.

This is a short-sighted approach that may come back to haunt you. At some point, every landlord is likely to do a bit of research. If the landlord is really upset, they may look for a different renter.

Beyond that, there's the question of whether it's fair to assume your landlord is adequately informed. You don't have to volunteer to pay the highest rental rate in the area, but you could update your landlord on the ever-changing economics of farming and regularly review all aspects of the lease or rental agreement.

With the growing season quickly approaching, now would be a good time to be proactive.

We welcome your feedback and story ideas. Email kevin@hursh.ca or tweet @kevinhursh1.

This FCC publication is dedicated to helping producers advance their management practices. Here, you'll find practical information, real-life examples and innovative ideas for your operation.

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

MARK CARDWELL / Mark is a freelance journalist and writer in the Quebec City region. markcardwell.ca

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.

HUGH MAYNARD / Based in Ormstown, Que., Hugh is a seasoned journalist and broadcaster specializing in agricultural communications.

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

OWEN ROBERTS / Owen teaches agricultural communications at the Ontario Agricultural College, University of Guelph, where he's director of research communications. He's also a freelance journalist.

Your Money

Get your ducks in a row for a loan application

BY LORNE McCLINTON

As borrowing needs get larger, it becomes ever more important to develop a solid, ongoing relationship with your lender. Meetings to discuss a new loan application will be much smoother if you are well prepared and have all the necessary financial information readily available.

"If you're looking for millions of dollars of financing, you better be able to show them a pretty detailed business plan that would justify it," says David James with James Farms in Winnipeg, Man. "It would have to include a fairly comprehensive budget showing your cost and returns, as well as information on your cash flow that will show how everything is going to come to fruition."

"Our number one goal is to strengthen our balance sheet and have plans in place to mitigate risk."

"You can never have too much information on hand when you go in to meet with your lender," says Ryan Clubb, a relationship manager with Farm Credit Canada in Wyoming, Ont. "We usually ask for three years of financials for the company or the individuals who are going to be on the loan, regardless of the loan size. Bring along an updated net worth statement, too, so we have a snapshot of where you're at financially with your debts and assets." He also recommends you be ready to explain any items in your financials that might appear unusual.

And just because someone is worth a couple of million dollars doesn't mean they can take out a large loan, Clubb says. Many farmers have a lot of equity but not necessarily a lot of available cash. A producer should be prepared to show how they'll manage the loan without putting a big strain on the operation.

That's the benefit of a lender seeing a customer's last three years of financials. It shows whether they are spenders or savers. Those who can demonstrate they've been paying down debt or investing in revenue-generating assets are in a better bargaining position.

Curb your enthusiasm

Clubb sometimes sees customers who are overly optimistic with income estimates while underestimating expenses. He says many could benefit from spending more time reviewing their financials.

"If they don't fully know their numbers, they can't identify where the risks are in their operation, so they aren't prepared to mitigate them when they arise."

Lending institutions are more comfortable with customers who can point out concerns in the operation right up front, Clubb says. It demonstrates they know what's going on with their numbers. It's more worrisome when the lender is the one bringing concerns to light, since it raises questions about the producer's management skills.

"At the end of the day, I don't think institutions are looking for any particular right or wrong answers," says grain farmer David James. "They want to have confidence you've done your preparation and homework, so they have a sense that you know what you're talking about. Our number one goal is to



institution."

With a strategy in hand, James knew where he wanted

the operation to be in five years, and how each

on your next loan application.

purchase would fit into his goals. He could clearly explain what they wanted to do and how their current borrowing fit into their long-term vision for the farm. Planning, preparation and a clear understanding of your financial situation could make all the difference

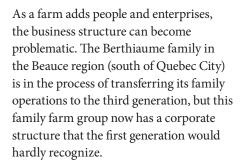
as-is and post-loan.

5. Government-issued

photo ID.

Entrepreneurial spirit powers 14 family enterprises

BY HUGH MAYNARD



Second-generation shareholders Cécilien and Sylvie, Mario and Solange, along with third brother Marco, brought their individual companies together when they built a feed mill, even though their enterprises were involved in very different sectors. The feed mill redistributes its profits among the other enterprises and lets the family group take advantage of market opportunities. The third generation has adopted the same forward-looking vision and follow their parents' approach as operations are passed on to them.

Nimble, flexible and diverse

That third generation – Lori-Anne and François, and their cousins Alex and Yan – now have shares in the feed mill and find it does provide significant savings for the 14 enterprises in the group.

Along with their father Cécilien, Lori-Anne and François are also shareholders in a number of operations, and are primarily

engaged in hog production and real estate. Alex and Yan co-own several corporations with their parents, Solange and Mario, and their uncle Marco. The businesses range from dairy and maple syrup production to raising broiler chickens and hogs to accounting services that cater to other producers.

Why such a complex structure for a farm? Basically, it's a way several family members and their respective operations can be involved in the farm group and benefit from the range of available financial programs.

There's a place for everyone, both in terms of the work they perform and as owners. Lori-Anne, for example, initially thought her finance degree would take her off the farm to work. Instead, she applies her financial skills to benefit all the enterprises in the family farm group, even though she doesn't set foot in the production buildings every day.

The structure also allows the family to add (or remove) lines of business, or make acquisitions without impacting the other companies – they only need to include those individuals who are directly involved. Alex and Yan are the only two family members who are shareholders in the dairy and maple operation LaitPorc MC. Mario and Solange are shareholders in Encans Sélect Gène, a livestock and



machinery auction business, along with four other partners who aren't related to the Berthiaumes.

Lastly, as the family members learned from the significant hog pricing cycle fluctuations in recent years, having a structure where each company is a separate entity minimizes the risk that an unproductive line of business will be detrimental to the others. Even if one bale falls off the wagon, the stack stays standing.

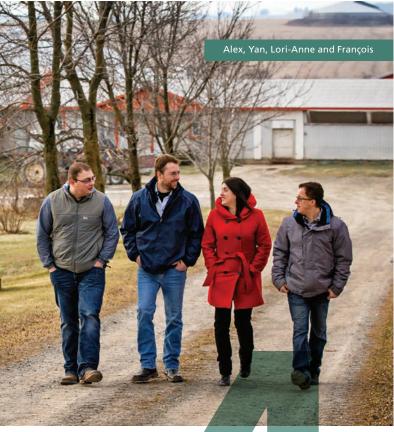
A constant evolution – people and technology

The current aggregation of farming enterprises under the Berthiaume umbrella continues to evolve as the interests and involvement of the family members change and new opportunities arise. That's what happened with Construction Solupro. A construction company may seem out of place in the mix, but when Cécilien, Sylvie, François and Lori-Anne saw a chance to develop real estate in the village of Saint-Elzéar, they seized it. That business decision clearly illustrates the entrepreneurial spirit that runs through the Berthiaume family.

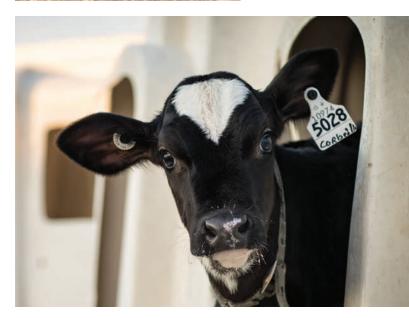
Although eight family members are actively involved in the various farming operations, labour remains the biggest challenge. "It's tough to find local people



Several family members and their respective operations can be involved in the farm group and benefit from the range of available financial programs.













The main factors behind this corporate yet family-owned structure are the same ones that ensure the profitability of those enterprises.

willing to do the physical chores and work the kind of hours that farming requires," François explains.

He flashes his smartphone to show the computerized pen-monitoring system used in the hog barn - just one of many technological advances adopted by the family in order to remain productive and reduce reliance on labour. Still, they've had to bring in two temporary workers from Guatemala.

Communication and education key to success

How have the Berthiaumes managed to pull together all the pieces of this jigsaw puzzle? Effective communication is critical, says Lori-Anne, emphasizing that the spirit of openness has always been part of their family culture.

Yan adds that his parents wanted to be sure the transfer from one generation to the next would be successful. "My grandparents would be proud of what

we've accomplished, just as they were when they managed to transfer their farms over to our parents."

Education is another key component for these young farmers. All four have some post-secondary education, yet Alex emphasizes that the important thing wasn't so much what subject they studied, whether agriculture or another field. "Our education gave us better organizational skills and the ability to think more about what we wanted to do," he says.

Lori-Anne wholeheartedly agrees. She is about to complete her MBA, building on her degree to give her a stronger foundation in finance and a more global perspective on their operations. "I find that I now explore each point further, do more research, and have developed a totally different vision."

The main factors behind this corporate yet family-owned structure are the same ones that ensure the profitability of those enterprises. Farmers are constantly

assessing the benefit of buying more land, machinery or buildings. Such discussions prompt the next generation of Berthiaumes to continue following the vision their parents had when, in 1995, they built the family feed mill that became central to all the entities in the farm group.

At that time, Cécilien, Mario and Marco felt it was a priority to achieve a return on their investment quickly by controlling feed costs and quality - and using less labour to do so.

Investment ideas continue to be a frequent topic at the Berthiaume dinner table and management meetings. They realize they will need more space if they continue to expand, but buying land is not the only option they consider. Whether it's diversification or production methods, they routinely evaluate their options as the collective-enterprise model of their family farm group continues to progress.

Cécilien Sylvie

Lori-Anne François



How have the Berthiaumes managed to pull together all the pieces of this jigsaw puzzle? Effective communication is critical.

Marco



Élevages MMS 150,000 broilers 2,600 hogs

LaitPorc MC

90 cows (104 kg of fat a day)

2,000 maple taps

Mario Solange

Alex



Solutions Danex Accounting services

services



ViaPorc

Porc SB

Ferme Césy

Franlor

Bodeporc

Porc ZSS

Ferme Mélyanne

Groupe Agro Dynamique

Construction Solupro

1,850 sows

14,000 hog

Canda

Hardware store



556 acresCorn, soybeans



Meuneurie Berthiaume (joint enterprise)

17,155 tonnes complete feed for pork, poultry and dairy



287 acres

Corn silage, forages, soybeans



Technology

Set rules for workplace smartphone use

BY PETER GREDIG

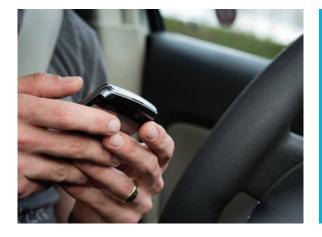
Employees are going to have smartphones. That's a given. I talk a lot about the benefits these devices bring for communication, access to the Internet, and apps that make us all more efficient. But there is a line where too much or inappropriate smartphone use is a problem on the job. Every employer now needs to think about laying some ground rules.

Let's start with the road. Distracted driving laws target drivers who are texting or using their smartphones. There can be no ambiguity about this among your staff: zero tolerance must be the standard. Make sure employees know that if they do not have hands-free capability, they must pull off the road to use the phone.

More thought is required for smartphone use in the field. Some of the calamity photos we see showing mangled combines and sprayers are the result of auto-steer equipment combined with a distracted driver. Power line towers, ditches and other obstacles not tagged in the GPS guidance system mean even hands-free operators must be alert and paying attention – especially at night. Legitimate smartphone use relating to the job is one thing. Using your smartphone for entertainment is another.

Safety is the primary driver here, but it's also about efficiency and being properly engaged with the task at hand. While general rules help, employers will have to address specific situations on an ongoing basis and say it's not acceptable to be on the phone when doing certain jobs.

Our growing involvement with social media is one of the reasons people overuse smartphones, even on the job. For some, it's an addiction. I think it's fair for employers to ban participation in social media during work time. It goes beyond the loss



It goes beyond the loss of productivity and focus. It's also about pictures or videos employees may take on the job and post to Twitter, Facebook or other social media channels.

of productivity and focus. It's also about pictures or videos employees may take on the job and post to Twitter, Facebook or other social media channels. A clear policy that regulates taking pictures and video, and gathering other workplace information via smartphone, should be considered and discussed.

Employers can be proactive in guiding smartphone use on the job so it enhances productivity rather than being a time-waster or safety concern. Apps like Voxer make it easier to communicate as a team, and providing employees with the best possible hands-free Bluetooth devices is a good place to start. And be consistent in following your own rules and setting a good example for staff to follow – if employees see you texting while driving, which is illegal in most jurisdictions, it will surely undermine your policy.

Follow Peter: @agwag



FCC Credit Line Cash flow when you need it

Need short-term credit? Waiting for a sale to go through? When it comes to bridging the cash flow gap, it's nice to know you have pre-approved financing that you can use anywhere.

1-888-332-3301 | fcc.ca/CreditLine





How to counteract the looming phosphorus deficiency

BY KEVIN HURSH AND PETER GREDIG



Phosphorus is essential for many critical plant functions, but it's often under-applied and, in many cases, soil levels are being depleted. So much so that well-known soil scientist Rigas Karamanos often refers to it as the forgotten macronutrient.

Karamanos has enjoyed a long career in both the private and public sectors and is currently the senior agronomist for Koch Agronomic Services based in Calgary. Simply put, Karamanos says crops in many fields across the country are using more phosphorus than what's supplied in fertilizer applications. Gaps are accentuated in years with high yields.

While Ontario has some livestock-intensive areas where P levels are too high, Tom Bruulsema, phosphorus program director for the International Plant Nutrition Institute in Guelph, reports that it's

more common to find levels in decline on cropland growing corn, soybeans and wheat.

To monitor nutrient removal for all crops, the Institute has a handy mobile app for iPhone and iPad devices called the Crop Nutrient Removal Calculator. Enter the crop and yield, and the app will tell you how much of each nutrient has been removed.

Why is it a concern?

The application of nitrogen has increased dramatically over the years, while phosphorus usage has remained largely constant. More nitrogen can provide an immediate and obvious yield boost when other factors are not limiting. Higher levels of P, beyond the starter rates typically

applied with the seed, may not provide much of a yield boost in the year of application.

However, over time the soil will become increasingly phosphorus deficient if crop removal rates consistently outpace what is being added. Studies show that depleted levels can decrease crop yield potential, and you can't entirely compensate for this by a one-time fertilizer application.

Contributing factors

In Manitoba, depletion is a trend that worries soil scientists. A recent factsheet on the topic was co-authored by John Heard (Manitoba Agriculture, Food and Rural Development), Cindy Grant (Agriculture and Agri-Food Canada) and Don Flaten (University of Manitoba).

It notes that many cropping plans now include more canola, soybeans and corn, which remove more phosphorus than cereal crops do.

Short or long term?

Heard, Grant and Flaten address the sufficiency versus sustainability issue with analysis based on the Ontario Soil Fertility Handbook.

In a short-term sufficiency approach, the cost of phosphorus is paid for by the yield increase in the current crop year, and no economic value is given to the residual effect of fertilizer. This approach is most common with short-term land tenure, such



Technology like this **Crop Nutrient Removal Calculator** from Guelph's International Plant Nutrition Institute – available as a free app for iPhone or iPad – lets producers monitor nutrient removal in all crops.

as annual land rental. It may also be the approach when crop prices are low relative to P prices, or if the land has limitations to yield other than fertility.

With long-term sustainability, there's recognition that the nutrient applied has residual benefit to subsequent crops. This approach is suited to long-term land tenure and high-yielding, high-value crops. Soil phosphorus levels tend to stabilize in the medium range, rather than dropping to low levels.

How to apply

Phosphorus is relatively immobile in the soil, and germinating plants have a high requirement for it early in the growing season. That's why the nutrient is typically applied with the seed or banded near the seed row. Row width, the crop and other factors determine how much can safely be applied with or near the seed.

For Prairie farmers, Rigas Karamanos points to a calculator developed by South Dakota State University that may aid in seed row placement decisions.

Don Flaten says that for phosphorus not placed with the seed, banding is a better strategy than broadcast applications. Especially in the fall, phosphorus applied to the soil surface is susceptible to loss through runoff, and that can contribute to environmental issues downstream.

Flaten is concerned with what he calls "naked planters" that don't allow for starter phosphorus with the seed or for banding. He points out that such planters can be retrofitted.

In Ontario, the practice of placing dry starter fertilizer in a band two inches below and two inches to the side of the corn seed has given way to a small amount of liquid "starter" or "pop up" fertilizer applied with the seed. Convenience and capacity are the drivers. As a result, less phosphorus is being applied at planting, and application is done primarily by broadcasting - not the optimal way to maximize the benefit of the nutrient.

Many farmers don't apply any phosphorus when growing soybeans. While an increasing number of Ontario farmers use air seeders for wheat, which enables application with the seed, many still use box drills with no fertilizer capability.

"The trend in Ontario is towards large planters without dry fertilizer capability, more broadcasting, but less tillage. The result is more P concentrated in the top few inches of soil where it is vulnerable to runoff," Bruulsema says.

The phosphorus challenge in Ontario is two-fold: maintain productive soil levels and reduce loss to water sources in the Great Lakes basin. Significant algae blooms in Lake Erie in 2011 and 2013 have put renewed emphasis on monitoring the amount of phosphorus that may be finding its way from farmland to waterways.

Takeaway messages

Phosphorus depletion is an issue we ignore at our peril. Yields will gradually erode as soil phosphorus becomes a limiting factor.

As John Heard says, phosphorus fertilizer is a conversation, not a single answer. Your equipment, crop rotation, tillage practices and even land tenure are all part of the equation.

"Depleting soil P levels is like deficit spending. If it continues for too long, it can be very difficult and expensive to climb out of the hole," Bruulsema says.



At a Glance

TOP **3** AG DATA PRINCIPLES





Thinking organic?

It's not for everybody – it's management intensive and there is a learning curve – but it may be worth a look.

Input costs for organic crops are about half of conventional

Demand for organic food in Canada has increased 170% since 2002 More than 58% of Canadians buy organic food products every week

Organic farmers keep \$58 on average for every \$100 of revenue per acre, compared to \$31

Check out the brochure Organic Advantage: Transition to Higher Profits available on the OVCRT News menu at COG.ca.

- Farmers should own their data. Any data collection, use or sharing should only occur with farmers' consent.
- 2 Farmers should be notified if their data is being collected and how it is shared or used.
- It should be easy for farmers to access their data for storage or use in other systems.

See the full list at Agriculture.com (search "Data Privacy" for a link to the article Data Privacy & Security Principles Encourage Use of Tools).

SPRING **SOFTWARE** PREP

For farmers across Canada, early spring is all about making sure every piece of equipment is maintained and prepped for duty. Pre-season software prep can be just as important in streamlining data collection and record keeping through the growing season. It also creates a plan for each crop and field.

Glen Kroeker suggests tools like Field Manager PRO can be pre-loaded, making it easy to record specific activities as they occur. You create a plan in advance and check a box when each activity is completed. It saves time and helps everyone stay organized.

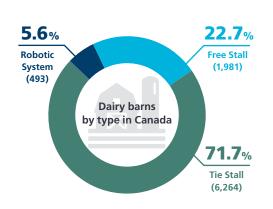
Visit fccsoftware.ca for details.

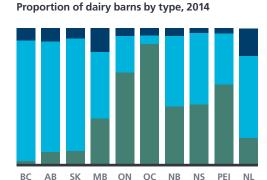


"There's no time to be entering field names, histories or product lists when under the gun at seeding."

- Glen Kroeker, Director FCC Management Software

MOST POPULAR DAIRY BARN SYSTEMS DIFFER ACROSS CANADA





Source: Canadian Dairy Information Centre (2014)



Soybeans continue to march west

BY OWEN ROBERTS

Prairie farmers are putting soybeans to the test. Increasing acres and positive results in recent years show the crop is more robust than many thought. This success is answering the question that more Prairie farmers are asking: can soybean varieties succeed in this relatively harsh climate?

Canadian soybean pioneer Peter Hannam faced similar questions in Ontario some 50

years ago. Then a student at the Ontario Agricultural College, he heard professors say Ontario didn't have enough heat units for soybeans and even if farmers somehow managed to grow a crop, what would the industry do with it?

Hannam, though, sensed a huge untapped opportunity for Ontario farmers and went on to develop a company with other

progressively minded farmers, First Line Seeds. Ultimately, through advanced plant breeding and new technology, they developed high-yielding varieties that thrived in lower heat units – long before anyone started thinking about growing soybeans as far north as Ottawa.

History may be poised to repeat itself in Western Canada. In 2015, Manitoba

surpassed Quebec for the first time in soybean acreage, amassing 1.3 million acres. Seed companies trial cold-tolerant varieties as far north and west as Saskatoon. There, respectable yields of 40 to 50 bushels an acre are not uncommon, comparable to production figures found in Ontario.

"Soybeans are becoming an exciting story here," says Gary Lannin, sales manager for Monsanto in Saskatchewan. "In my area, they're still in their infancy, but there's a lot of interest and observers who are always hungry for high-value crops, and who have a strong desire to add diversity to their crop rotations."

Breeding for yield

"Soybeans bring a very strong weed control package that surpasses any other crop farmers grow here," he says. "In 2015 we had a fantastic year, an experience that shows soybeans can do well here. The next step is to grow them consistently."

Plant breeders are enjoying this challenge. Don McClure, soybean product development scientist and soybean research manager for Syngenta Canada based in Arva, Ont., calls new soybean variety development a "fun experience" for breeders. "As we go west, we need shorter and shorter maturing varieties that are also high yielding," he says. "For the first time, I can say we're finally there."

Soybeans have numerous virtues, such as fixing their own nitrogen, low input requirements and established markets. But to be profitable, they have to fill bins. "Farmers get paid for yield, so that's our number one breeding target, no matter if we're in the east or the west," McClure says. "To succeed, soybeans need agronomic traits such as disease tolerance and resistance, which we've incorporated

into a lot of our varieties. But ultimately, we default to vield."

Prairie farmers can benefit from management lessons learned by Lannin, McClure and others in Ontario such as Dave Harwood, technical services manager for DuPont Pioneer Canada.

Pest resistance built in

As Harwood says, soybeans have experienced a number of agronomic challenges over the years but in each case, management tools have become available from input suppliers.

For example, soybean aphids emerged in the early 2000s. Foliar crop-protection

products were rapidly registered, followed closely by seed treatments that effectively suppress aphid populations. Seed suppliers are now developing varieties with resistance.

As well, over the past two decades, soybean cyst nematodes have grown in significance in Ontario. In response, breeders have created varieties with resistance for virtually all maturities used there, allowing growers to maintain productivity in the face of this pest.

And disease control in soybeans using fungicides was largely unheard of 20 years ago. But growers are now able to benefit from crop protectants that help control the most damaging disease in Ontario

"To succeed, soybeans need agronomic traits such as disease tolerance and resistance, which we've incorporated into a lot of our varieties. But ultimately, we default to yield."

soybeans – white mould – using foliar fungicides.

Weed-control traits

When glyphosate-resistant soybeans arrived in 1996, it was "game changing technology," Harwood says. They contributed to improved weed control in other crops by lowering the weed seed bank and controlling perennial and biennial weeds.

And now, with the emergence of glyphosate-resistant weeds, new soybean varieties with stacked traits that address most species will provide another tool set. These include varieties tolerant to glyphosate and dicamba, and glyphosate and 2,4-D, to address resistance in Canada fleabane, giant ragweed and even common ragweed.

"A lot of development work has gone on behind the scenes," says Syngenta's McClure. "Pending approval, varieties with these new traits are ready to be planted."

Follow Owen: @TheUrbanCowboy



PROJECT SOY REACHES 20-YEAR MILESTONE

Project SOY – an acronym for Soybean Opportunities for Youth – has become a unique part of soybeans' history in Ontario. The student contest, developed and run exclusively at the University of Guelph, encourages students to compete annually to produce products that further enhance soybeans' use.



The range of projects and products to emerge over the past 20 years speaks to the success of the competition. Today, the contest is sponsored by Grain Farmers of Ontario, Dekalb, the Ontario Ministry of Agriculture, Food and Rural Affairs, and Soy 20/20.

Students develop research skills, working with academics and commercialization experts and get advice on taking their inventions or recipes

to the next level.

Over the years, student innovation has produced a plethora of soy-based products: nano-fibre wound dressing, high-tech epoxy for electronic applications, soy-chocolate truffles, and woven shoes and shopping bags

made of plant stalks.

The most successful products launched are the dips and spreads marketed under the brand name Yoso. These were born in the late 1990s by contestants Erik and Francis Lo, two brothers with a family history in the food business (their grandfather founded the multinational Vitasoy). After graduation, they set up shop in Cambridge, Ont., and now operate a thriving business with products on supermarket shelves throughout Canada.



- 1. Isabelle Groulx, Nutrichoc'O Soy, chocolate truffle.
- 2. Rajendran Muthuraj and Oscar Valerio, Soybag, soy-based shopping bag.
- 3. Shujath Khan, Michael Biancanielle, Aalaa Osman and Kyle Bradfield, Sojabond, soy-based epoxy for high-tech applications.

Protect your farm from internal fraud

Most farms are family enterprises with family members as shareholders or employees. Often, there are also other employees. How common is fraud in this environment?

While I'm not aware of any information that looks specifically at farms, U.S. studies show smaller enterprises of less than 100 employees are more prone to fraud, and there are actually a number of factors that make family businesses more susceptible. Procedures tend to be less formal, and family members are often the most trusted employees. Furthermore, the perpetrator may not even realize that his or her behaviour is inappropriate.

Even if it's detected, fraud often goes unreported and this would be especially true in family businesses where the family would typically want to be discreet about any inappropriate actions.

Do business owners often discount the likelihood of fraud?

Yes, especially with family members and long-term employees. However, the opportunity to commit more extensive fraud increases with a person's authority, power and degree of oversight.

What forms can fraud take?

The misappropriation of assets is the first to come to mind. This can be as simple as theft of petty cash or selling goods that the individual doesn't own. Fraud can take many other forms as well – the use of business fuel in personal vehicles without anyone's knowledge, misuse of business credit cards, inaccurate reporting of work time or vacation time.

How large can the damage be to a business?

Some business owners tend to discount the size of losses, believing they are insignificant. In fact, losses are often substantial. And depending upon the circumstances, there is also the risk of reputational damage.

How do people committing fraud rationalize their behaviour?

Especially in family enterprises, there can be a sense of entitlement, where someone thinks they are owed more than their paycheque. It can also be a misunderstanding unless the business has clearly defined rules and policies and has effectively communicated them.



Family businesses are not immune to internal fraud from employees and family members. Here, Carrie Hall shares advice for spotting and preventing fraud in your operation.

CARRIE HALL

Carrie is based in Atlanta and is the family business leader for Ernst & Young LLP. She leads a team of professionals that helps family businesses think entrepreneurially and sustain their competitive advantage from generation to generation

Carrie writes about family businesses and how they can successfully compete.



Ask an Expert

Prevention is vital, and that starts with the education of everyone involved in the business.

Are there any red flags in a person's behaviour that may indicate a likelihood of committing fraud?

The Association of Certified Fraud Examiners has conducted research into the behavioural red flags displayed by perpetrators during the time of their fraud and has identified notable trends. More than 80 per cent of fraudsters exhibit warning signs, and not surprisingly living beyond their means and experiencing financial difficulties consistently are the most commonly observed behavioural red flags.

People who commit fraud don't typically match the "criminal" stereotype. Most have never been charged or convicted of a fraud-related offence. They tend to be employees who have been on the job for a number of years and they are able to commit the crime because management trusts them.

In addition to financial pressure, their motives could be greed or employee disenfranchisement. They might believe they are entitled to more financial compensation, and they may rationalize that they are just temporarily borrowing the money.

How is fraud most often identified?

Sometimes it's found by accident and sometimes it's identified in an internal audit or management review, but the most common method of discovery by far is through a tip.

It's important for those with suspicions not to conduct their own investigations. They should approach the appropriate person in management and it should be clear to all the employees who the appropriate person is. The whistleblower should remain anonymous if possible and should certainly be shielded from any repercussions.

Are remedies more difficult when it's a family member?

Situations are all different, so there's no way to make a blanket prescription. Communicating expectations is sometimes all that's required. In serious cases, the solution may involve the person leaving the business or there could be legal ramifications.



VIDEO:
David Irvine
addresses key
challenges
of working
with family.
fcc.ca/
FamilyBusiness

What preventive measures should family businesses employ?

Prevention is vital, and that starts with the education of everyone involved in the business. You need well-defined policies, and controls must be enforced. There can be different rules for different people in the business, but this should be clear to everyone.

Having the proper prevention in place is a lot easier than dealing with a serious problem that arises because policies and internal controls were not in place. ■

Get approved to buy inputs now, take until March 2017 to make payment

FCC Crop Input Financing

Today

Buy for this year's crop

Spring

Purchase inputs Plant and fertilize

Summer

Apply crop protection

Fall

Harvest Market crops







Take until

March 2017

to make payment

Call your participating input retailer or FCC at 1-888-522-2555 | fcc.ca/CropInputs



Safety on the Farm

Personal stories help bring Ag Safety Week to life

BY MARK CARDWELL

Accidents always happen to somebody else.

At least that's what Réjean Pommainville thought until that summer afternoon in 2009 when he fell from the top of a loaded hay wagon and shattered his left heel on the ground. "It changed my life," says the third-generation farmer, who was 54 at the time.

"I kick myself whenever
I think how easily I could
have prevented it," says
Pommainville, who farms
just east of Ottawa, near
Limoges. "I should have
been more cautious, but
that's how it is on a farm.
When you've done
something all your life,
you don't stop to consider
the danger."

Still dogged by chronic pain from the injury, which required metal plates and 14 screws to fix, he was forced to quit dairy farming and take up cash crop production, which is less physically demanding.

That's why Pommainville puts so much stock in initiatives like Canadian Agricultural Safety Week (CASW). Held in mid-March since 1986, CASW features a mix of live and online activities that highlight farm safety according to a particular theme.

This year launches a new three-year campaign, dubbed Demographics.

"There are a host of people who live on, work at or visit farms, from family members and friends to suppliers and service providers," says Marcel Hacault, executive director of the Canadian Agricultural Safety Association. "For the next three years we'll drill down deeper on the dangers these individuals face, using data and personal stories of injuries and fatalities on Canadian farms."

Headquartered in Winnipeg and funded by various supporters, notably Agriculture and Agri-Food Canada and Farm Credit Canada, CASA co-ordinates, develops and runs a variety of safety training and awareness programs across the country.

CASW is both a cornerstone and the marquis event in the organization's efforts to help Canadian farmers recognize and manage safety risks.

As in past years, the 2016 campaign will feature two official launch events with safety workshops, and Internet-driven activities dealing with safety and demographics.

"It helps get our message out in the media and on social media," he says. "And it's a good time of year to raise awareness and get safety on people's minds, because the farming season is just getting going."



Check out **AgSafetyWeek.ca**

March 13 – 19

Attend an event in your area

Fun and educational launch events will take place across the country

Get farm safety tools

Find resources that will help keep safety top of mind for your family, farm and community

Read, listen and watch at fcc.ca

Get insights and advice to move your farm forward

FCC Ag Economist

Read blog posts and reports from J.P. Gervais, FCC Chief Ag Economist, and our team of economists and researchers on everything from exchange rates to oil markets to farmland values. Get new perspectives on economic events that could impact Canadian ag – and your bottom line.

FCC PICKS



The Top 5 Economic Trends Facing Ag In 2016

Ag Knowledge

Find innovative ideas and valuable advice in articles and interviews featuring industry leaders, and get information that can help you grow your business.

How can you put drive time to good use? Tune in to **FCC Edge** agriculture podcasts, hosted by Kevin Stewart, for features and interviews on business, technology, farm safety and more. Listen to one at our website, or subscribe using iTunes or your favourite podcast catcher so you won't miss any of the new insightful episodes.

Choose from more than 350 videos to help you stay informed, learn something new or get inspired about Canadian agriculture.

Subscribe to FCCTVonline and get sector and farm management tips to use in your operation.



Cell Boosters Keep You Connected Tech Insights Peter Gredig



Best of FCC Edge: Problem Solving 00:26:08



Pure Holsteins: Embracing Innovation and Each Other 00:07:06

Explore **fcc.ca** – make it your source for agriculture online.

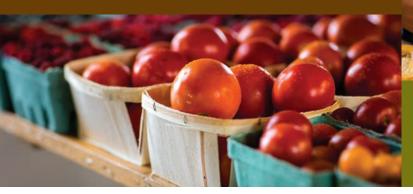
We all share the same table. Pull up a chair.

"We take pride in knowing we would feel safe consuming any of the crops we sell. If we would not use it ourselves, it does not go to market."

- Katelyn Duncan, Saskatchewan

"The natural environment is critical to farmers – we depend on soil and water for the production of food. But we also live on our farms, so it's essential that we act as responsible stewards."

- Doug Chorney, Manitoba



"The welfare of my animals is one of my highest priorities. If I don't give my cows a high quality of life, they won't grow up to be great cows."

- Andrew Campbell, Ontario

Safe food; animal welfare; sustainability; people care deeply about these things when they make food choices. And all of us in the agriculture industry care deeply about them too. But sometimes the general public doesn't see it that way. Why? Because, for the most part, we're not telling them our story and, too often, someone outside the industry is.

The journey from farm to table is a conversation we need to make sure we're a part of. So let's talk about it, together.

Visit **AgMoreThanEver.ca** to discover how you can help improve and create realistic perceptions of Canadian ag.











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