

CountryGuide

Strategic. Business. Thinking.

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A photograph of a middle-aged man with grey hair, wearing a brown quilted jacket over a plaid shirt. He is looking off to the side with a thoughtful expression. The background is a soft-focus outdoor scene.

A new playbook

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Dry Beans at risk of Soybean Cyst Nematode

Meghan Moran
Canola & Edible Bean
Specialist OMAFRA

Have you ever had a dry bean crop that looked healthy but resulted in disappointing yields? Have you seen stunted or yellowing patches, but could not identify the cause? If so, you may want to look for soybean cyst nematode (SCN).

Researchers in Ontario and the US have shown that SCN is not just a soybean pest, it also reproduces on dry beans. SCN saps nutrients from the plant and can restrict root growth. There may or may not be visible above ground symptoms when beans are infected with SCN.

The impact of SCN on dry beans depends on the market class, and may also depend on the specific variety. AAFC researchers planted 40 dry bean varieties in SCN infested fields in 2010-2011, and about half had cyst counts similar to the SCN-susceptible soybean variety. These included cranberry, dark red kidney, and some white bean varieties. Other trials have shown that adzuki beans are very susceptible to SCN, more so than susceptible soybeans.

In studies conducted at North Dakota State University using 24 varieties (white, black, kidney and pinto), SCN developed normally on



all classes and varieties of beans. Kidney beans had high numbers of female cysts, similar to susceptible soybeans. SCN reproduction was lowest on black beans. The different white bean varieties had a wide range of female SCN counts, but within the other classes of beans there were no differences across varieties. SCN-inoculated bean seedlings (one variety each of pinto, white and kidney) were also assessed in field conditions and taken to yield. Up to 56% reduction in seed weight of SCN treated pinto beans was observed compared to non-inoculated controls, and up to 37% and 31% for the white and kidney beans, respectively, although losses were not recorded at all locations.

In general, kidney beans appear to be as susceptible to SCN as soybeans are, and adzuki are more susceptible. Black and white beans appear to be less affected by SCN than other bean types, although studies show variability across

white bean varieties and few studies have been taken to yield. Cranberry beans have not been extensively studied to date.

SCN is known to be present across southern Ontario, as well as in parts of central and eastern Ontario, which includes the regions where dry beans are grown. Producers should soil sample fields to determine their risk of yield loss. Soil samples taken for fertility can be split and submitted to labs for SCN assessment. In August or September, carefully dig up plant roots and look for small pearl white or yellow cysts. The cysts will be smaller than nodules on the roots; you may need a handheld magnifying glass. Management will include lengthening rotations and choosing a market class than can perform under SCN infection, and research is currently being conducted at the University of Guelph on the efficacy of seed treatments. SCN resistant dry bean varieties are currently not available.



MACHINERY

Versatile debuts for 2018

Comparing the company's new RT 520 combine as it celebrates another milestone.

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Governing the farm

With diversification changing the nature of their farm, and with three generations now involved, Steve Tomtene wanted to set up a system with rules that would minimize the impact of disagreements and keep the family working together. Here's how his solution started at a SeCan meeting.

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Young women like Pam Bailey and Amanda Jeffs are joining formerly all-white, all-male farm boards. And for the most part, they're being warmly welcomed.

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One more question for mid-size farms



For almost a decade, mid-size farms have been the winners in Canadian agriculture, growing their equity without taking extravagant gambles. Can that continue?

I've just been rereading an editorial I wrote 10 years ago. Such things happen to all of us from time to time when we stumble across a note in a drawer or a friend we knew at the time.

If nothing else, it teaches humility.

The editorial had to do with the contradictory signals farmers were getting from the market, with strong prices saying it was to expand, and high land prices saying it was too big a gamble.

Surely, I said, by 2018 the winners and the losers would be clear.

In a way, I think they are. But not at all in the way we thought.

Back then, the crucial choice seemed to be between being fast and bold with your expansion, or slow and cautious.

To help choose the right strategy, I could only go back to the three questions that business schools always teach for such quandaries.

The first question is to ask yourself about the long-term outlook for your principal products, and for your sector overall. We've learned a lot about this in the intervening years, including that our answer to this question has to be tightly bound up with our expectations for the Canadian dollar.

Overall, we're less assured than we were a decade ago, especially because production has surged to incredible heights. But we shouldn't overlook that global demand is amazingly strong. If we'd had today's yields a decade ago, it feels like we'd have been selling crop for pennies a bushel.

It's important to remember that we're only one difficult season away from a potential weather market, although this is hardly the basis of a business plan.

That brings up the second question. It's also very important. How is your performance in the field and in your accounts compared to other producers?

Nothing reduces risks more than being competitive.

Next, the business pros would tell us to ask how our financial resources compare to others in our sector. In other words, if times get tough, can you hang on? If the farm beside you comes up for sale, can you expand?

One of the great lessons of this past decade, though, is that we must add a fourth question.

How aggressively have you been adopting more sophisticated business management?

I highly recommend you read Maggie Van Camp's excellent "Governing the farm" article in this issue, based on her interview with Saskatchewan seed grower Steve Tomtene. In fact, get your magnifying glass out.

Steve's solutions don't have to be your solutions. Every farm is different, not only in size. But are you matching his willingness to look everywhere he can to adapt what he finds to his own needs.

His story wasn't there to tell 10 years ago. Now it seems a harbinger of what must come.

Are we getting it right? Let me know at tom.button@fbcpublishing.com.

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SR&ED credits for the agricultural industry

If you're doing research on your farm or in an agricultural business, you may be eligible

**BY JULIE BOND
CEO, BOND CONSULTING GROUP
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The Scientific Research and Experimental Development (SR&ED) Program has been around for a long time — approximately 30 years. It's the largest and most important corporate tax incentive program in Canada, providing \$2 to 3 billion of support to Canadian businesses annually.

Unfortunately, the program is still largely misunderstood. To this day, too many business owners and financial advisors still believe that SR&ED is a technology program or a manufacturing program. As a result of these misconceptions, the SR — scientific research — part of the program goes largely untapped, especially in agriculture.

Refunds are paid to corporations that can prove that they have achieved "an advancement in knowledge in a field of technology, science or medicine." So, yes, farms, wineries or greenhouses can apply for projects that involve plants and animals.

In order to apply, your business must be incorporated. Your company does not need to be profitable to take advantage of this program, which is a common misconception.

The SR&ED program rewards companies with cash refunds when the company spends its own money on labour, subcontractors, and materials relating to company work or projects that involve a scientific uncertainty. Even if the project fails economically, the company is entitled to claim for the benefit.

When eligible projects or work are identified, the company can receive almost 70 cents back on every dollar spent in T4 labour, and about 40 to 45 cents back on every dollar spent on materials or related contracts. That's a really great deal.

The program is retroactive. Typically, you can go back two years to claim for eligible work.

What's not eligible? Entirely routine work is never eligible. Also, economic or marketing projects are never eligible, such as using known technology to increase sales or improve processes.

But work involving any legitimate scientific or technological uncertainty can be claimed. That could be climate or genetic experimentation in greenhouses with plant varieties, nutrition or housing experimentation with farm animals, studies relating to pesticides, agronomy, viticulture, veterinarian science, plus projects that involve technology in agriculture.

Typical SR&ED claims are worth \$30,000 to \$100,000 per year for your average farm.

All farms should seek an assessment to see if they already have qualifying projects which are eligible to be filed before the 18-month deadline has passed. An SR&ED specialist can help identify eligibility, and advise on best documentation practices relating to substantiating your claim. A good SR&ED specialist will work with your accountant to make sure that the company is maximizing its benefits under one of the most generous programs of its kind in the world.

You give the government a lot of your hard-earned money every year. Maybe it's time to figure out if the government owes you some back.

VERSATILE debuts for 2018

Winnipeg-based manufacturer shows new combine, anniversary tractor



The Versatile RT 520 combine replaces the previous RT 490 that it introduced in 2011. PHOTO: VERSATILE.

BY SCOTT GARVEY / CG MACHINERY EDITOR

The regional Manitoba Ag Days indoor farm machinery show in Brandon takes place every January, but isn't exactly known as the kind of event where major manufacturers debut new machines — with one notable exception.

Versatile, whose manufacturing plant is just two hours down the highway, has embraced the event as a place to show its new machines to a local audience.

“Ag days is always a good show for us; it's our home market,” explains Adam Reid, Versatile's marketing manager. “We're well known here, so it makes sense for us to launch new products here. Because it's the Brandon show, because it's so close to home, we wanted to make sure we had a really good presence here this year.”

Big among the new products the brand debuted is the RT 520, the successor to the firm's outgoing RT 490 combine. The 520 gets some tweaks to the same basic threshing body used on the 490, such as a larger clean grain elevator.

“[It] will actually help improve capacity especially in wet crops,” Reid says. “We also have a new feeder chain system on the front.”

But the main improvements are up front where the operator lives.

“The feedback from customers has been good on the threshing,” says Reid. “But they really wanted more operator comfort, especially with the amount of time you spend in there. So in addition to making the cab bigger, we've made it quieter.”



The company may do a limited production run of its one-off silver anniversary edition front-wheel assist tractor if customer demand warrants it. PHOTO: SCOTT GARVEY

The RT 520 cab is about 30 per cent larger than on the previous model and it gets a more comfortable environment with a more ergonomic control layout.

"All the changes the customers have been asking us for have now been integrated into the 520," Reid says. "We've also increased the lighting kit by more than two and a half times. So for someone jumping out of an RT 490 and into a 520, it's almost a night and day difference."

Versatile has had a long-time relationship with Cummins, so the RT 520 will get that brand's 12-litre QSG six-cylinder diesel for a power plant.

"Versatile has been in a partnership with Cummins for 52 years now," Reid notes. "When we looked at what our dealers were used to working on and what the demands were, Cummins had the right engine for us. It's got the right mix of power and fuel economy. We probably have more power in this combine than we actually need. We've never had a farmer complain to us about the power."

The new combine sticks with the Versatile philosophy of being simple, reliable and easy to maintain, according to Reid. He notes that the brand's evaluation showed that the most difficult drive belt to change required only a little more than an hour of downtime. And he adds the overall design is intended to accommodate in-field repair and maintenance.

"2018 will be a limited release," Reid says. "Versatile tends to approach all our new products with a little more caution at the outset, just to make sure we're providing the right product to the market."

ANNIVERSARY TRACTOR

The combine wasn't the only thing Versatile took to Brandon to catch farmers' eyes. A one-off 365 tractor painted

in black was also there to celebrate 25 years of front-wheel assist tractor production at the Winnipeg plant.

It isn't the first time Versatile has offered tractors with a unique paint scheme. Its limited production 50th anniversary four-wheel-drive tractors painted in a "legacy" themed livery easily sold out almost before the program was widely publicized.

Says Reid: "When you say Versatile, people think of four-wheel drives. But we do have a 25-year legacy of building front-wheel assist tractors as well. What we did for the 25th anniversary is one tractor. It's done in black paint with a silver fleck in it, of course 25 years being a silver anniversary. We're just doing one right now, but if there's demand we might build a few more." **CG**



The combine cab is 30 per cent larger than its predecessor and has a more ergonomic control arrangement.

PHOTO: VERSATILE



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Hip, Hip, Hip Hooray for me!

Celebrating success when you're a go-it-alone farmer

BY MADELEINE BAERG

Front and centre in almost every “how to succeed in business” book is the recommendation to take time to celebrate success. As the authors point out, celebrating is a great way to mark progress, foster team spirit, build staff loyalty, push a business to greater heights — and ultimately trigger more success.

But does that advice still apply if you're an independent, self-employed farmer whose “team members” might be more likely to have four legs and tails? You betcha!

“Pretty much everyone needs to do more celebrating,” says Gina Zepick, a mentor and life coach with Soul on Fire Mentoring, who has spent the past 18 years helping individuals, businesses and organizations to grow and to navigate change.

Before you pass Zepick off as an urbanites’ coach who can’t possibly understand the priorities and complexities of agriculture, know this: Zepick was not only born and raised on a cow-calf operation (at 72, her dad is still going strong at the family ranch), she completed an ag degree at the University of Saskatchewan and then spent the start of her career with Saskatchewan’s Department of Agriculture.

Plus, she has significant experience coaching and mentoring both individual farmers and ag-related organizations, including the Saskatchewan Alfalfa Seed Growers Association and the Canadian Food Inspection Agency.

So, when Zepick says celebrate, she means you, too.

“When you celebrate and intentionally feel gratefulness and joy, it sends out positive energy vibrations that actually change you physically, mentally, socially, spiritually,” says Zepick. “I’m not talking about drinking beer and having a party (though that can be one option). Celebrating is about making time to appreciate success, and it’s something we should all be putting more effort into.”



“This isn’t about showing off,” Gina Zepick says. Instead, it’s about building your chances of future success, and having a great time too

1. WHY?

Aside from the fun, what does celebrating success actually achieve?

Success brings success. Need convincing? Just consider the opposite. Have you ever had one of those really bad days, where it seems as though everyone and everything is conspiring to make sure nothing goes right? In fact, the cause of all the “wrong” is not everyone or everything: science proves it’s actually you. Yikes!

“You can choose to be right about absolutely anything. Choose something to believe and you will keep collecting evidence that reinforces that belief. If you focus on having a bad day, you’re going to keep finding and focusing on things that reinforce that it’s a bad day. By intention alone, you’re going to create negativity around you,” says Zepick. “So, the question we all have to ask ourselves is: what do I want to be right about.”

In other words, your reality is shaped by whatever you practise. Practise gratitude: you’ll be more grateful. Actively look for joy: you’ll feel more joy. Truly and intentionally experience the feeling of success: you will be more successful.

Celebrating success releases endorphins in your brain that make you feel strong, powerful and joyful. Someone who regularly experiences these positive feelings about self and the surrounding world is better able to tackle challenges with confidence, energy and positivity. Since success is hugely dependent on attitude, a person’s future success is heavily influenced by the intentional acknowledgement of past successes.

As Peter Drucker, commonly called the father of management consulting, said, “The best way to predict the future is to create it.”

2. WHAT?

What does it take for a success to be worth celebrating?

Everyone’s definition of success is unique. So the first requirement for meaningful celebration is to identify what success means to you. Zepick recommends dividing milestones into three categories.

First, look at the big picture, i.e. the overall reason you’re doing what you’re doing. Let’s be honest. There are lots of much easier ways to make a living that don’t require the all-in commitment, the 24-7 lifestyle or the risk that farming demands. Keeping in mind why you decided to farm is

a key component of deciding what constitutes a success worth celebrating.

Outline (ideally, on paper) major career and life goals. Maybe they include expanding your business, purchasing land or other major assets, paying off a mortgage or other debt, and/or passing on your farm to a younger generation. Successfully completing any of these milestones deserves real celebration.

Then, consider the season, especially the goals that get you out of bed each day. Outline seasonal goals such as completing significant tasks or projects, or purchasing mid-value assets like a new vehicle.

Also look back to your big-picture goals and figure out smaller steps that will move you towards those major achievements. These smaller steps often fall into seasonal goals. Successfully completing any of these milestones deserves acknowledgement.

Finally, consider the day. The marker of a success for any given day may be different than for any other day.

"Farmers often think: I got task 'x' done but I still have 27 more things to do. Actually, it's important to take a moment to appreciate what is complete rather than what is still to come," says Zepick.

"One of the things I love to tell people most is how normal they are. There is real comfort in being normal. Most of the population, when they have 10 things on their to-do list and get nine done, will beat themselves up about the one thing they didn't do. Celebrating the success of what you have accomplished will make you more energetic to complete that 10th item."

Once you've outlined your goals, don't simply close your notebook and forget them. Strategic planning and goal setting only work if they become part of your ongoing management method.

3. HOW?

How do you choose the right ways to celebrate your success?

So long as you make time to acknowledge, honour or applaud milestones and achievements in some form, there is no right or wrong way to celebrate success. The key to a quality celebration is that it be authentic and comfortable to you. Depending on who you are and how your farm operates, celebrate.

... BY YOURSELF

Is it possible to celebrate all alone? Absolutely! Though we usually think of celebrations as being social and communal, simply taking time to feel joy in an achievement or gratitude in a success is an important way to reinforce positivity.

"We joke about doing the happy dance or patting yourself on the back, but recognizing success really is a visceral thing, a good energy in your body," says Zepick. "If you aren't celebrating, no one else will do it for you. You need to create that positive energy loop for yourself."

What does a solo celebration look like in an actionable context? The answer depends entirely on who you are. For some farmers, simply standing in a just-harvested field and intentionally pausing to soak in the pride of completion is enough. For others, taking a day off, buying that fancy bottle of Scotch, or tying an intended purchase (maybe that truck you've been eyeing, or a trip you're considering) to a specific business success will magnify the joy of the success.

... WITH THOSE WHO ARE CLOSEST

Invite others to share in celebrating success. Whether that person is your spouse, extended family, a close neighbour or a trusted friend, intentionally sharing the pleasure of a success or a milestone gives weight to the achievement or event.

"Don't confuse sharing a success with showing off. This isn't about showing off. It's about sharing something positive with trusted people who want the best for you. Part of a relationship agreement between people who trust each other is that they celebrate together. So literally pick up that phone and make a point of telling those you trust," says Zepick.

... WITH THOSE WHO UNDERSTAND YOUR BUSINESS

Sometimes, the people with whom you share the closest relationships don't have the background, experience or knowledge to really understand the importance of a specific success. In that case, being able to share your achievements and milestones with a group of like-minded professional peers can be incredibly satisfying.

"It might be your neighbours, maybe it's other entrepreneurs, or maybe it's a gathering of other farmers. The point is, it's a group that gets together to strategize and connect about business, brainstorm around challenges, and *CELEBRATE!*" says Zepick.

Your business or farm can only grow to the extent that you do, she points out.

"If you're never open to getting outside input, you can't grow beyond a certain level. We all need to surround ourselves with people, for inspiration, for challenge, to push ourselves, and to celebrate when we make those milestones. Those relationships are critical if you want to grow your business."

... WITH A COACH, MENTOR, PASTOR OR OTHER ON-YOUR-SIDE PROFESSIONAL

If you happen to be a more private person, the concept of sharing success with a roundtable of peers may be far outside your comfort level. In that case, seek out a professional adviser of some kind who can fill the role of an unbiased confidant.

"My job as a mentor or coach is to boost your energy to get you moving in a more positive direction, and to get you creating things in your life that you want," says Zepick. "Imagine looking out a window. All you can see is what's outside that one window. My job is to give you more windows and help you see that maybe things can be different."

Building an authentic, trust-based, open and professional relationship with an adviser depends on finding the right person. Look for someone with significant experience, preferably specific to agriculture. Interview until you find someone with whom you feel natural and comfortable. Then, says Zepick, "Jump in. You have to make the decision to trust that person with your concerns, your struggles, your questions and your successes and joys."

If you're a go-it-alone farmer, the usual business celebrations like team lunches, corporate parties, formalized recognition programs, promotions, bonuses, etc., might not suit you. However, the basic rule of celebration holds true in any business: those who celebrate success will have more success to celebrate.

So, raise that glass, do that dance, tweet that success, take that trip, buy those clothes... however you celebrate best, just get out there and do it. You owe it to your business. **CG**

5 Steps to a High-efficiency Seedbed

Set Up Your Fields for High-efficiency Planting

Whether planting row crops or seeding cereals, the fast, uniform emergence that's so critical to helping your chosen hybrids and varieties reach their full yield potential starts with the seedbed — and, of course, cooperative weather.

Here are five ways to rethink your row-crop seedbed and take control of your farm's potential in 2018.

1) LOOK BELOW THE SURFACE TO CREATE A HIGH-EFFICIENCY SEEDBED.

Certainly, the soil surface is critical. But you need to dig deeper — to the subsurface floor — and pay attention to everything in between. In row crops, the subsurface floor determines how your planter's row units ride (or bounce) across the field — not to mention how well they can cut residue. It should be firm and smooth to ensure proper seed placement.

2) PRACTICE PROACTIVE TILLAGE VERSUS REACTIVE PLANTING.

Cutting-edge planters are very good at reacting to poor seedbed conditions, but what if they didn't have to? Instead of assuming you'll "fix" the seedbed come spring, focus your efforts throughout the year — starting with residue management out the back of your combine. From there, find the right disk ripper, vertical tillage tool or disk harrow to help you size residue, mix and bury it in the fall or leave a protective surface layer that sets your fields up for success in the spring.

3) FIND WAYS TO BOOST PLANTING EFFICIENCY — BEYOND ACRES PER HOUR.

High-efficiency planting is measured at the end of the season,



Pair the Tiger-Mate® 255 field cultivator with the 2000 series Early Riser® planter to reap the benefits of a high-efficiency seedbed combined with seed placement accuracy.

not at the end of the day. As you evaluate your planter's performance, think about potential upgrades that will help make the most of ideal conditions, such as in-cab adjustments, row-closing down pressure or hydraulic downforce. For example, consider how in-cab fine-tuning can help you quickly tweak settings from field to field or as conditions change across an individual field — without the wear and tear you endure while jumping in and out of the cab all day.

4) FOCUS ON ACHIEVING FAST, UNIFORM EMERGENCE.

In corn, plant spacing is important, and a picket-fence stand looks great from the highway. But quick, uniform emergence is a better measure of planting success. In fact, university Extension research shows fields that get off to a fast, uniform start yield more.¹ When factors like inconsistent seeding depth and poor crop residue distribution slowed germination and emergence for 17 percent of corn plants, yields dropped by

anywhere from 4 percent to 8 percent. That's 6 to 12 bushels per acre on 150-bushel corn.

5) JUST BECAUSE YOU HAVE A HIGH-SPEED PLANTER DOESN'T MEAN YOU SHOULD PLANT AS FAST AS YOU CAN.

The seedbed, not your planter's capabilities, sets the speed limit. Know your field conditions and adjust your tillage practices accordingly to create a smooth, level finish. It's also important to make sure your finishing pass is matched to your planter's potential productivity levels. Consider this: A 60-foot Tiger-Mate® 255 field cultivator matched with a 24-row 2150 Early Riser® planter (with in-furrow fertilizer) can cover up to 1 acre per minute.

IT'S GOOD FOR CEREAL CROPS, TOO

Stand establishment also is among the most critical factors in helping a wheat crop reach its full yield potential.² Uniform emergence leads to a crop that matures evenly. This is desirable not only at harvest but also for timing in-season pesticide applications.³ Strive for a seedbed where your seeding equipment can achieve consistent seed depth and spacing, along with excellent seed-to-soil contact. Many of the same principles described above apply here, too, with even residue distribution and sizing and soil particle sizing and mixing topping the list.

Visit caseih.com/seedbed to learn more about small changes that can drive efficiencies on your operation.

RESOURCES:

¹What's the yield effect of uneven corn heights? Iowa State University Agronomy Extension website. <https://crops.extension.iastate.edu/whats-yield-effect-uneven-corn-heights>. Accessed February 1, 2018.

²Shroyer J. Wheat seeding tips for good stand establishment. Kansas State University Extension Agronomy eUpdate. https://webapp.agron.ksu.edu/agr_social/eu_article.throck?article_id=332. Published August 29, 2014. Accessed February 1, 2018.

³Johnson P. Spring Wheat Planting. South Dakota State University Extension iGrow website. <http://igrow.org/agronomy/wheat/spring-wheat-planting/>. Published March 5, 2013. Accessed February 1, 2018.



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TOP HR ISSUES FOR FARMERS

Concerns about employment standards and employee performance are driving more farmers into HR training

BY ANGELA LOVELL

When human resources consultant Janice Goldsborough first gets a telephone call from a farmer, it's usually with questions related to employment standards.

"They might be asking about whether they have to pay overtime, the rules around statutory holidays, or is their farm even covered under employment standards; those are typically the kind of questions that farmers ask," says Goldsborough, who is contracted by Manitoba's Keystone Agricultural Producers (KAP) and the Manitoba Pork Council to help their members with HR issues.

Unfortunately, most of those calls occur when something has gone wrong, which is something Goldsborough is trying to change by raising awareness about the need for sound HR strategies for farm businesses.

"I go to producer meetings and do a lot of presentations about HR and employment rules, and most times they look at me like I've got three heads because they've always done things their way and are reluctant to change," says Goldsborough. "Then they call me a month or two later saying, 'I got my hand slapped, so I had better start looking at what I'm really supposed to be doing.'"

If a farm is strictly a grain operation, employment standards don't usually apply to them but if the farm has any kind of climate-controlled operations, for example a cattle barn, dairy or pig barn, employment standards often apply, whether they employ only family or not.

"In the past there was never a separate Employment Standards Act for agriculture. Everybody was lumped in together and it was up to Employment Standards to try and figure out who was covered and who wasn't," says Goldsborough. "Now there is a separate act for agriculture, and for construction and a number of other industries, so I think that was an awakening for many producers. And of course, with changes in government there are always changes in employment standards, and it's quite complex to keep up with those changes."

NEXT GENERATION MORE CONCERNED WITH HR

Goldsborough helps farms develop a HR strategy, and says that HR is increasingly being recognized as an important part of farm management, especially among the next generation of farmers.

"The universities are really focusing more on the human resource aspect," says Goldsborough. "The older generation is looking at succession planning and it's the younger ones who are coming out of school with a better knowledge about HR issues."

Goldsborough's strategic HR framework starts with looking at the legal side of the operations. "Are they following employment standards and do they need written policies?" she says. "Smaller farms maybe don't but larger farms should have policies in place that state how much vacation somebody gets, how much time off they get for lunch and other basics like that. Do they have job descriptions? How can the business hire somebody if it doesn't know what it wants them to do or the skills required to do the job?"

Often, HR issues arise for farm businesses when they start to hire people other than family members and realize that they need to get up to speed on employment rules and requirements. Workers Compensation, as an example, was an eye-opener for many producers when it became compulsory for the farming industry a few years ago.

Goldsborough helps identify some of the pain points for farmers and provides some training to help them through the processes involved in HR management, including recruitment.

HELPING WITH THE RECRUITMENT PROCESS

Rick Prejet has worked with Goldsborough over the past couple of years as chair of the Manitoba Pork Council's Sustainable Development and Research Committee. He has also found her advice and knowledge invaluable to his swine operation near Notre Dame in southern Manitoba that employs 35 people.

Some of Prejet's staff have attended Goldsborough's recruitment training courses. "It's given our staff a better understanding of things like how to run an interview, and what questions you can and cannot ask," says Prejet. "It's also helped them understand some of the legal responsibilities when you're recruiting and once you have somebody hired."

Farm employers are also dealing with different expectations from their employees. Increasingly, younger people are more concerned with life/work balance than their predecessors were. Young parents also want flexible working hours to accommodate their children's needs, and employees from other countries may have different cultural approaches to employment.

"It's been very valuable for our staff to attend Janice's courses because she talks about other cultures, and we have a lot of foreign employees," says Prejet. "Each culture is very unique and she has helped us

understand what things are important to them, for example, their respect of elders.”

Being able to understand the expectations and needs of employees across different genders, demographics and cultures, and to incorporate that into an HR strategy helps keep employees engaged and feeling that they are valued, which has immense benefits to the farm business because recruiting and training new employees is costly and disruptive to operations. “It can really shock some people how much they spend to hire employees,” says Goldsborough. “I always say, if you’ve spent all this money, you want to keep them so let’s look at things like training, staff development and performance management.”

MANAGING EMPLOYEE PERFORMANCE

The Manitoba Pork Council’s HR Committee recently surveyed its members to find out what HR issues were priorities for its industry, and performance management and conflict resolution topped the list.

“These are broad issues that we have to wrap our heads around,” says Prejet. “Typically, in farming in the past, you didn’t spend much time on HR. It’s definitely a different world today because you notice that if you do or say the wrong thing for certain people, all of a sudden, the performance is not there and it can spread quickly amongst the whole staff. To build a culture and maintain it is a challenge. For us, we want to find the best ways of motivating employees.”

Most of the employees that Prejet has hired over the last few years have been friends or relatives of existing employees. But, with expansion plans for the business in the works, the company needs to adopt different strategies to recruit people with the management skills it needs.

Prejet has also started advertising in local newspapers, through the Manitoba Pork Council and through the federal government’s Job Bank website. “We need to have more people with management abilities and people skills, and they tend to be harder to find,” says Prejet.

It’s crucial, says Prejet, that the company find people who can manage and motivate the many different cultures it has within its workforce.

“Every country has its own culture, and its own method of production and everybody’s got their own views on health and safety and so many other things,” he says. “It’s not easy to put all that together and find somebody that can come in and push everybody to do a better job, but also lead them and have them buy in on that. If it doesn’t work out you lose months of time and you’ve got to start all over again and there’s no guarantee the next person is going to work out any better.”

That’s why Prejet and his company are working on a complete HR strategy that includes a bigger plan to develop the people they have.

“We want all of our staff to take these HR courses, not just our managers because conflict resolution is not just about somebody coming in and taking care of everything;

people have to understand what’s going on,” says Prejet. “When we sent people to conflict resolution training in years past, they came back with a better understanding that if I’m part of the problem, I need to be part of the solution. It’s good for everybody to take this kind of training.”

Prejet says Goldsborough has provided them with some excellent tools to help the process along, including a couple of online manuals to set up company HR policies that they are adapting to their own company. Having that outside help has been critical for them, he adds.

“Janice is independent and her advice is non-judgmental; it’s not government related because people are often scared that they’re going to get in trouble with Workplace Health and Safety or the Labour Board or something,” he says. “She helps farms be within the rules and regulations but also to understand the people they’re working with. It’s nice to be able to pick up the phone and know, even if she isn’t an expert in every field, she’ll help us with what she can and direct us on to someone else for the things she doesn’t know.” **CG**

What does it cost to replace a worker?

It costs a lot more than you think, according to research

The cost of replacing a single worker can be as much as 150 per cent of their annual salary.

“Turnover” is the rate at which workers leave and are replaced. Many farmers don’t know what their turnover cost is, yet it can have a major impact on the productivity and profitability of their farm.

The Canadian Agricultural Human Resource Council (CAHRC) has just launched two new online tools to help farmers calculate and understand their turnover costs and see how their turnover compares against industry benchmarks for their province and commodity.

The Cost of Turnover Calculator estimates the financial cost of each worker departure including employee wages and benefits, separation costs, hiring and training costs and the cost of employee ramp-up time.

The Turnover Benchmarking Tool allows a farm to see how its turnover rate compares to other farms in the same province or commodity and assess whether that turnover rate is healthy or if it is hurting the farm business.

Employee turnover is a costly issue for farms across Canada. Once you’ve hired motivated, committed and qualified people, it is key to retain these workers. While turnover is a natural part of business, avoiding unnecessary turnover will ensure that your business is as productive and profitable as possible.

The Turnover Calculator and Benchmarking Tool research was funded in part by the federal government’s Sectoral Initiatives Program.

Links for the calculators:

[//hrtoolkit.cahrc-ccrha.ca/tools/turnover-calculator/](http://hrtoolkit.cahrc-ccrha.ca/tools/turnover-calculator/)

[//hrtoolkit.cahrc-ccrha.ca/tools/benchmark-en/](http://hrtoolkit.cahrc-ccrha.ca/tools/benchmark-en/)

EQUIPMENT SALES EVOLVE FOR 2018

RME exec Jim Wood talks about Canadian ag machinery sales trends

BY SCOTT GARVEY / CG MACHINERY EDITOR

As U.S. and Canadian farm equipment dealerships wrestled with their hangover from the half-decade of hyper sales activity that ended a couple of years ago, the job of finding new homes for a large number of used machines may have been their biggest problem.

For the most part, that trouble has now faded from view, for Canadian dealers at least. Dealer used-equipment inventories have settled into a new normal.

One factor that helped ease the problem is that demand for good used machinery in Canada is now reasonably strong.

But Jim Wood, chief sales and operations officer at Rocky Mountain Equipment, says

the good harvesting conditions this past fall caused a bit of a slowdown in sales as many farmers kept their current machines working through the good weather.

“As far as the industry goes, I think everyone would say they’d like to have sold a little more,” he says. “But I think because of the easy harvest, everyone was left with a little more (inventory) than they thought.”

Even though there is no longer a general glut of machines sitting on dealership lots, Canadian retailers once again face the need to cope with increased investment in used inventory. But this time it isn’t because of too many unwanted machines, it’s due to the Canadian dollar faring too well against the U.S. greenback. The higher exchange



Jim Wood is the chief sales and operations officer at RME. PHOTO: RME

rate has pushed up the price of new equipment and lifted the values of late-model used equipment right along with it.

For dealers, that means their total used investment is higher, Wood explains. “But it’s just because the dollar (amount) is higher. The number of units is down.

Looking for growth

Rocky Mountain Equipment, Canada’s largest dealer of both CNH brands (Case IH and New Holland), already has over 35 stores across the prairie provinces, but according to Jim Wood, chief sales and operations officer, the company is always on the lookout to add to that number.

“We’re definitely always open (to it),” he says of expansion opportunities. “But you have to have willing sellers too, right?”

Finding willing sellers of established dealerships is getting to be a bigger challenge as more and more consolidation has taken place in the industry. That also means there are other retail chains out there that may be competition in the hunt for established stores to add to their networks.

“But we’re definitely looking,” Wood says. “We’ve delivered on our balance sheet and kept inventories in line, so we’re definitely healthier than we’ve ever been. We want to expand; it’s just where and when.”

And although there may be a few isolated opportunities in regions such as the northern Peace River district of B.C. or communities in

northern Alberta to create startup stores, Wood isn’t eager to go down that road. The initial investment is high and it can be a very time-consuming and expensive process, with a lapse of several months before the company could even open the doors for business.

“For us it’s tough to put a fresh store in somewhere,” he says. “Because you have to hire people, you have to develop the area. I’d much rather just buy something that already exists somewhere. It’s a heck of a lot easier.”



One of RME’s new outlets, which shows the building design the company hopes to eventually have at all its locations. PHOTO: RME

That's in addition to the normal increase as higher-priced, more sophisticated machines replace older, more basic units in dealers' used inventory, especially when one-year-old trades are taken into account.

"When we take a one-year-old 8240 in, let's say it's worth \$450,000 today. If we took a one-year-old 8230 in three years ago, it was probably worth \$300,000. So if you take the same amount in every year, your used value is worth more just because the value is so much higher."

But Wood says that isn't necessarily bad news, as long as the market for used machinery remains reasonably good.

"Used is a profit centre for us, it's not like we just take a trade to get rid of it."

Wood says the certified pre-owned warranty programs that all the major brands instituted at the height of the used inventory crisis have been useful sales tools in keeping used machines rolling out to farmyards. And they have given producers in Canada a useful way to keep investment costs down when refreshing a farm fleet despite that high U.S. exchange rate.

"Customers get better programming," he says. "There's a little more work in it for us, but it definitely benefits the customer with extended warranty."

When it comes to sales of shiny new machinery, Wood says RME is on par with the industry trend that is looking good. According to AEM (Association of Equipment Manufacturers), November's year-to-date sales tally for Canada of tractors in all horsepower classes, along with self-propelled combines, had jumped significantly over 2016. Notably, four-wheel-drive tractor sales climbed by 21.3 per cent and combines outpaced that, getting a 25.3 per cent boost.

Those numbers paint a rosier picture up here than what's currently happening in the U.S. market, where rigid-frame models above 100 horsepower, the most common tractor sales category, are down 8.1 per cent, although there is single-digit growth in the four-wheel-drive category, along with combines.

"We're happy with it," Wood says of sales volumes. And he notes most lease agreements signed at an RME outlet are for longer periods, up to five years. But machines often come back for replacement earlier than that.

"For us, it's the longer lease term with

the lower payments," he explains. "It's not necessarily that people want to keep the equipment that long, it's just that that's the amortization of the lease to keep the payments down. Depending on the equity, if you lease a machine over five years, by about two

and a half years in, they're in an equitable position. So then they'll trade again."

"I wouldn't say that it (the lease period) has stretched because of the economy, I think we're just trying to keep their payments down for cash flow." **CG**



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COMPETE AND WIN

Your machinery strategy may be nothing less than the factor deciding how long you'll be in the world of agriculture

BY MAGGIE VAN CAMP / CG SENIOR BUSINESS EDITOR

It's an impressive resumé, showing how Joerg Zimmermann's work and his research, plus his strong entrepreneur/farmer streak, have taken him to most of the main grain-growing regions of the world, including in Canada.

It's a series of experiences that have given Zimmermann a unique perspective about what farming looks like in the world's breadbaskets.

And because that same resumé lists his PhD as an agricultural economist, it's also bred insights into how Canadian farmers can compete and win.

It has all convinced Zimmermann that machinery management is maybe even more crucial to farm success than many farmers realize.

Today Zimmermann has settled outside of Winnipeg, from where he consults, teaches and runs a peer group for farmers on both sides of the border. He continues to travel the world researching efficiencies and working for agri-benchmark — a non-profit international benchmarking group that compares costs and prices using typical sample farms around the world.

Country Guide caught up to Zimmermann while he was helping teach AME's "Investing in Machinery and Equipment Course" (www.agrifoodtraining.com/investing-in-machinery-and-equipment-course) in Saskatoon. For this course he created spreadsheets to help the farmers set a machinery replacement strategy for their own farms.

"We are trying to take out the emotion in buying decisions and give farmers other criteria to make their decisions," Zimmermann explains.

Zimmermann's main point is that deciding about machinery inventory turnover must be about more than

sorting through the physical requirements and technical stuff, like horsepower. It's about calculating the total cost of continued use and repair versus replacement, and about seeing the impact on amortization and/or lease payments. It's also about seeing the effect on the whole farm's debt servicing capacity, cash flow and taxes, and then fully comprehending the time value of money.

"It's like checking an oil gauge on a tractor," says Zimmermann. "Are the ratios where they should be, or are they in the red?"

A machinery management strategy includes how much equipment to keep, how to choose the best options between owned, and financed or leased, or rented, and for how long it is held. Instead of making buying decisions on resale value, participants of AME's course are learning how upfront costs are having an impact on their bottom line for years, and they are asked to justify the extra investment.

The power is in playing with the combinations and figuring out how much you can afford to pay for various options, says Zimmermann. The calculations should help to quantify your arguments, and help you stay focused on risk and investment instead of the shiny paint your neighbour just purchased.

With good deals from the financing arms of an equipment manufacturer, it sometimes makes more sense financially to lease, but you have to crunch the numbers to see that clearly. "I'm generally anti-lease as they catch you in the back end whereas purchases hit you in the front end," says Zimmermann.

NORTH DAKOTA

Zimmermann facilitates a peer group with farmers from North Dakota and Manitoba. He also consults for farmers on both sides of the border, and he's been witnessing first-hand the cash-flow contrast between countries over the last few years.

Although the natural conditions in southern Manitoba and northern North Dakota are similar, the man-made line (i.e. the border) along with the different currencies are making for very different profitabilities.

"Right now with the U.S. dollar exchange rate, farmers in Canada are making fairly good money, but down there they haven't made a whole lot of money for three, maybe four years," he says. "What if the U.S. dollar and the Canadian dollar go to par again? Our farmers will lose profitability quickly."

Zimmermann says from what he's seen, the farmers



“I’m generally anti-lease,” says farmer and economist Joerg Zimmermann, who believes today’s machinery decisions will help determine whether Canada can be globally competitive

in the U.S. have adapted to the downturn and now are in better shape. It's a lesson he says Canadian farmers should be implementing now when they still have good cash flow. "In Canada a lot of grain farmers are tight on their debt servicing capacity and should think about ways to reduce it when things are relatively good," he says. "Instead of maintaining lease payments at the same dollars, maybe they should look at ways to stabilize cash flow for the future, if interest rates continue to rise or the Canadian dollar decreases."

U.S. farmers are slowly going through the used equipment glut that built up when their farm incomes were higher. A larger tax incentive to buy new equipment — they can write off bigger depreciations than CRA allows — spurred a massive transition when prices were strong.

Machinery debt is often a noose in tight-margin conditions and yet is sometimes overlooked for operating efficiency gains. "That is," Zimmermann says, "until the chair is pulled out."

RUSSIA/KAZAKHSTAN

Zimmermann knows first-hand the destabilizing effects debt servicing can have on a tight budget and unforeseen circumstances. In 2002 he started a 2,500-acre grain farm in Samara, Russia, with his father and a partner. Only a few years into the business, the worst drought ever recorded hit the region, eroding their working capital and within a few years they simply couldn't afford to keep operating.

Their farm was also relatively small compared to other farms. In Russia, and in much of the Commonwealth of Independent States (CIS), which formed after the Soviet Union dissolved, the size of farms has grown exponentially.

Zimmermann explains how after the breakup of the Soviet Union, each of the employees on the communal farms was given a land certificate. So if there were 1,000 employees on a 10,000-acre farm, they each got a certificate for 10 acres. The idea was they'd farm together but also have part ownership in the big farm.

But in many cases it wasn't sustainable. The massive, almost monopolistic grain trading/elevator/processor and poultry companies began ratcheting all the margins out of the system. Since these companies were the only game in town, farmers had no other choice but to sell to them.

Not surprisingly after a few years the farmers ran out of operating cash so the sole elevator (and processor, poultry company and trader) in the area financed their inputs and then gently squeezed the margins tighter again. When drought inevitably hammered

an area, the farmers couldn't pay back the company, and the company got the farms. "They were entrepreneurs seeing an opportunity," says Zimmermann with a shrug.

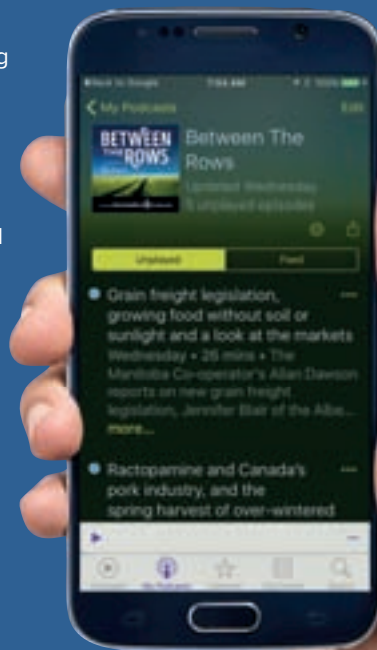
CONTINUED ON PAGE 18

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GLACIER farmmedia PODCAST

Today about a quarter of all the farms in Russia/Kazakhstan are owned by grain trading/processing companies and are massive, up to 2.5 million acres. They operate as big businesses often with staff and technology, modern facilities, genetics, equipment and management imported from all around the world.

Zimmermann says even though very smart people work for these large farms in Russia, they're not able to adjust to change as quickly as family farms in Canada. "Transaction costs are larger," he says "There's much more friction while operating these big structures. They burn parts of their advantage with friction."

Canadian farmers have an opportunity to use our management and operational powers to react relatively quickly. Plus we have the logistical infrastructure and the ability to grow high-quality grains and oilseeds.

Although we might not be able to compete with Russian feed wheat because of their low cost of production, we can manage commodity niches, sign direct contracts and go for higher-quality markets, says Zimmermann.

With their scale, Russian farms can compete in the lower-quality grains segment because of the low cost of production and low land cost, and their unimaginable equipment buying power.

Even so, machinery maintenance has been a struggle, especially in the early years of the open market. With so much growth and investment, dealerships were focused on sales only so they didn't repair much or even keep a parts inventory, says Zimmermann. "In Russia we bought Russian-made equipment so we could get parts."

In much of Russia, farmers grow cereals and sunflowers. Sunflower oil is the most popular cooking oil and

they have their own crushing plants. Southern Russia grows more corn and soybeans but also needs to import meal to feed their livestock.

"They're often forced to look at liquidity before profitability and that's why lower input crops are more popular there and canola is a higher-cost crop," says Zimmermann.

Siberia is similar to Western Canada and Zimmermann believes this area has huge potential to grow canola and pulses.

Between 2005 and 2008, Zimmermann developed a canola seed sales network in northern Kazakhstan and managed an affiliated 5,000-acre demonstration farm for a Saskatchewan company. The company had trials of different crops, including canola, wheat and barley varieties from Canada. He says the natural conditions in northern Kazakhstan are very similar to Western Canada, and they grow mostly cereals, but are slowly diversifying into pulses and oilseeds.

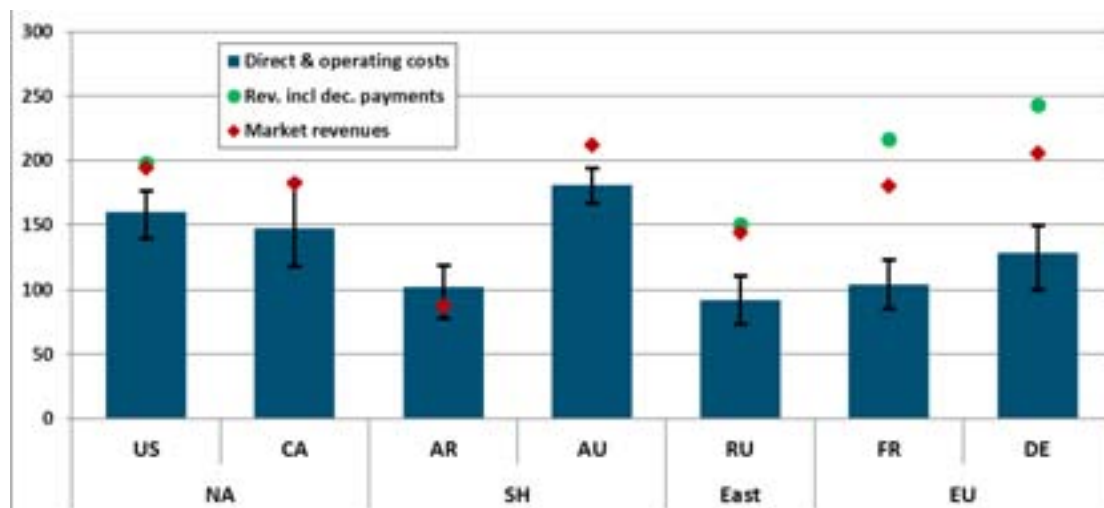
From that job sprang an opportunity, that for a few years Zimmermann was able to analyze and benchmark the farms owned and operated by a U.S.-based investment fund with large farm operations in Eastern Europe and the CIS.

One of the most significant differences Zimmermann noticed is the work culture in Russia, especially on the corporately owned farms.

He remembers one Sunday morning driving to a farm he was responsible for and finding everything had slowed to a stall, even though it was the middle of harvest and the weather was good. Nobody expected someone from the city would come out on a Sunday to check. **CG**

HOW COMPETITIVE IS CANADA?

Below is chart comparing direct and operating costs and revenues in US\$ for wheat between typical farms in various countries throughout the world in 2016 as supplied by agri benchmark. Surprisingly, Canada's direct and operating costs were higher than France, Denmark and lower than the U.S. and Australia, while in Russia it cost about a third less to produce a tonne of wheat than in Canada, mostly due to land and direct costs.



GOVERNING THE FARM

On most farms, 'governance' sounds like the last thing you'd want to talk about if you hope to keep everyone happy. Steve Tomtene used to think so too, but is glad he changed his mind

BY MAGGIE VAN CAMP / CG SENIOR BUSINESS EDITOR

Like many farms with added complementary enterprises like a trucking company or livestock barn or a seed business, Tomtene Seed Farm at Birch Hill, Sask., has developed systems to juggle all the moving parts.

"Maintaining identification and producing seed products of quality merit takes a shift in thinking about the products, about production, about the organizational structure," says Steve Tomtene.

Planning and thinking ahead is paramount to the success of their farm. The extra costs, management time and risks with seed produc-

CONTINUED ON PAGE 20

tion and with exporting niche products to many countries take stronger, smarter systems.

Of course, as a seed grower, it also takes a crystal ball, selecting varieties to grow this season to be sold three years from now.

And the Tomtenes are doing it on a fairly large scale with nearly 12,000 acres of canola, oats, barley and wheat, peas and flax to grow, plus processing, retailing, managing intellectual property and exporting around

the world. At that size it takes extra effort to allocate resources for documentation, cleaning, bin management and logistics.

Adding to the complexity, three generations of family members are working on the farm. There's Steve and Jeannette and sister Susan and her husband Dan Slind, who work with their semi-retired parents, Terry and Lois. Steve and Jeannette's son Brad is now farming full-time with them along with their daughter Sarah and husband Blair Strautman.

The stakes are higher than ever to do it right. As their business grew beyond supplying neighbours, more professional approaches were required. "Additional information adds value to the seed but that needs systems to manage that and there's more seriousness, more liability," says Steve Tomtene.

Tomtene also says being a seed grower requires a mentality of wanting to produce specific products that people want. Instead of producing a commodity, the psychology approach of having a symbiotic relationship with customers has led them to other relationships. For example, they grow IP canola for Cargill. "They want it. I grow it. There's an emotional connection," says Tomtene.

The mentalities of win-win and pre-planning infiltrate their farm and their family. For example, succession is continual, more like transitional business planning rather than estate planning, which is also how they approach governance.

Uniquely, the Tomtenes have created a simple business governance system and policies to smooth out the potential wrinkles of working together. "The system allows us to separate personalities from business," says Tomtene. "Governance policies show us how to separate business from personal needs and interests."

The idea of creating a system to avoid and manage potential conflicts came to Tomtene after he participated in a workshop held by Iowa farm adviser Jolene Brown. In her family business workshops, Brown shares tools to honour farm families by doing the business right.

One tool is for conflict management and others include a chart to help document basic job responsibilities and results, which leads to compensation. However, she does not have templates of governance or written policies.

"When it comes to family, I've learned more, not less, must be in writing," says Brown.

When Tomtene sat on the SeCan board, he noticed how simple and practical their board governance structures were and how well it worked for this member-only executive. So he basically extrapolated SeCan's governance structure to fit his own family farm. In a way SeCan is like a farm, except for the personal asset value, he says.

Now the farm has policies in place to deal with potential conflict areas and ways to help resolve any conflicts that may arise. For example, they have written policies on how they deal with compensation, vehicles and housing laid out in the living document. "It gives us an interface to deal with these issues," says Tomtene.

Building blocks for farm governance policies

The advantages of working with family are numerous and powerful: flexibility, affection, long-term thinking, children-friendly cultures, compromising for others, deeply shared purpose and history. It can be a competitive advantage... if you can prevent and manage potential conflicts.

To help you build governance policies for your business Elaine Froese took a page out of an old manual on managing multi-generational farms and created the list below in her book *Do the Tough Things Right...* She says the founding generation should flesh out their answers and then write each topic on a recipe card to be discussed one at a time at meetings.

1. Brief history of the farm.
2. Values of current owners.
3. Setting family business meetings — who, what, where and when.
4. Criteria for employment of family members.
5. Employing spouses, in-laws and children.
6. Compensation for family members and adding up the benefits and perks.
7. How to deal with non-family members and extended family.
8. How much volunteering and philanthropy is okay?
9. Management, ownership-transition timetable.
10. Expectation of minority shareholders.
11. Fair and equitable exit strategies.
12. How to distribute profits.
13. Nuptial and prenuptial agreements.
14. Conflict resolution process.
15. Leaves of absence and sabbaticals, vacation time.
16. Terms and conditions of loans to family members.
17. Who speaks for the business and does public relations.

He says other boards he's been on with no collective agenda and few rules of engagement tend to be driven by individual needs and independent thoughts. At these meetings personalities interfere with facts and figures.

Manitoba-based family farm adviser and coach Elaine Froese says farmers need to view conflict resolution strategies as part of business risk management. And mothers should not be put in the position of keeping the peace, a position that Ontario-based adviser John Fast calls "acting as family CEO" — chief emotional officer.

Instead, Froese suggests farmers can think and plan ahead on how best to deal with conflicts on their farms and use structures to keep family issues from taking over business meetings. "Select a chairperson, follow an agenda, set down rules of conduct, and take minutes," says Froese in her book *Do the Tough Things Right...*

Families need to understand how conflict is a normal part of business and life, and it can be positive. In other words, it exists but what really matters is how you deal with it. Come from a place of curiosity and caring, Froese tells her clients. Understand the underlying issues, and be prepared to forgive and seek common ground before the discussion about the conflict begins.

Also, really listen, ask questions, and be willing to play with possibilities and ideas. "By having a way to discuss conflict issues, the family can create a culture of trust," Froese says. "It should build confidence, accountability and create a culture of fairness, respect and commitment."

Potential governance strategies to prevent conflicts in family businesses include family employment policies (i.e. compensation, employment, exit and entry, reviews) plus formalized family meetings, strong, effective governance, sometimes with independent board members, and dealing with issues and conflicts as they arise in a direct, timely and open-minded way.

LEVERAGE YOUR SYSTEMS

It's also important to connect with trusted peers off the farm, says Tomtene, but keep the governance work confidential. He has a small group of nearby farmers he meets with informally three times a year. "It helps to have support, to know we are not alone out here," he says.

The Tomtenes have been growing seed and have been members of many seed associations for decades. Tomtene says those meetings have overarching issues and information but it's often in the side conversations, before and after the official meeting, where growers share information and become trusted friends.

It's a lesson that farm organizations can pick up on, he believes. Tomtene thinks Canadian farmers, with our strong business and regulatory systems, are primed to take advantage of world niche markets. But, he says, "We need to be partners you can trust to do business with."

Now, he says, farm groups need to lobby government for smart policies. It's just like on the farm. Systems have to have real purpose, Tomtene says. "Regulations can be a hindrance, if they are not thoughtful." **CG**

Governance policies show us how to separate business from personal needs and interests," Tomtene says. As farms grow larger, it's a role that grows in value



HER PLACE AT THE TABLE

In different parts of the country, Amanda Jeffs and Pam Bailey are rising to the same challenge, curbing the dominance of men on so many farm boards

BY ANGELA LOVELL

Bailey has always bucked the trend. As a child, she was far more interested in Lego and Tonka trucks than dolls, and she had dreams of becoming a mechanic instead of a nurse, teacher or the other jobs that “girls were supposed to do.”

At 34, she’s still bucking the trend. Bailey has just become the first woman on the Manitoba Canola Growers Association (MCGA) board of directors.

How she got there is a story for our times, beginning 2,000 miles to the east in the tiny village of Heatherton, N.S., the sort of place where community is everything.

“I grew up in an awesome community where public service was just something we did,” says Bailey. Heatherton boasted the first 4-H club in Nova Scotia, and Bailey’s grandmother was one of the first members.

Following in Granny’s footsteps, Bailey’s 4-H days provided her first taste of leadership. “4-H taught me basic leadership skills like how to run a meeting, how processes work, seeing projects through to the end, and judging,” she says. “Now I see the value in learning all those skills, especially in agriculture.”

Bailey later became involved in Nova Scotia Young Farmers, where she could apply her skills at a higher level and where she learned more about agricultural policy and the industry in general.

Although Bailey loved growing up on the family farm, she couldn’t see herself in primary production, so when she enrolled at the Nova Scotia Agricultural College, she took a degree in environmental horticulture. Even so, she ended up taking a lot of the same courses as the agricultural diploma students, which turned out to be useful when she eventually went back to farming.

A NEW LIFE IN MANITOBA

Five years ago, Bailey moved to Manitoba, where she took a job in agricultural parts sales at Portage la Prairie and where, within a month, she met her future husband, Rauri Qually. Although they were both working off-farm at the time, they soon started on a path that would see

them start farming with Qually’s dad on the family’s 1,200-acre grain farm a half hour east at Dacotah.

Today, the couple have been married just over a year, and both have off-farm careers as well as working on the farm. Qually is an electrician and Bailey is farm safety co-ordinator at the University of Manitoba and program facilitator at the Bruce D. Campbell Farm and Food Discovery Centre, at the university’s Glenlea Research Station.

WHERE ARE THE WOMEN?

Bailey is as busy as you’d expect any young farm woman to be, but the pull to serve the agricultural community remains strong. Although she’s no stranger to agriculture, she soon found that things work a bit differently in Manitoba, and she set out to learn all she needed to know, including about some of the agricultural organizations and producer groups in the province.

“I’ve always been active on boards and in non-profit organizations, so I started to take notice of who were the people on boards making decisions,” she says. “I noticed that in Canadian agriculture, specifically, the bulk of them are 55- to 65-year-old white males that are making decisions for a lot of younger people.”

While attending the canolaPALOOZA event, hosted by MCGA last year, she asked her neighbour, Charles Fossay, who was also MCGA president, why there weren’t any women on the MCGA board. He really didn’t have an answer but encouraged her to apply.

“I talked it over with a few colleagues and they said, what’s holding you back? You have the board and horticulture experience, so why not?” she says. “The other thing that convinced me was the thought that if I was complaining about the abundance of men on boards, I’d better be prepared to do something about it.”

Bailey considers herself lucky because she’s at a stage in her life where she can commit the time and effort to serving on a high-profile, provincial board. “I don’t have kids. I have a husband who is very supportive and in-laws and parents that can help if needed. I have some



“It can be challenging to explain to some men, and even some women, why diversity on a board is important,” says new canola director Pam Bailey

flexibility in my career and the financial luxury to be able to do these things,” she says.

She understands it’s not the same for all women. “You have to have a squad or tribe of people that are willing to support you and I think women in agriculture, especially, have always been there for each other,” she says. “But they’re always the ones that, looking back, have not been at the grower meetings, they haven’t been at a lot of these tables because they’ve been busy juggling all the other hats that women, in general, juggle constantly. Because a lot of women don’t have that voice and the ability to do what I am doing, I feel I owe it to them to do this.”

FACING THE “OLD BOY’S CLUB”

The Canadian Agricultural Human Resource Council surveyed more than 500 women involved in agriculture for its Supporting the Advancement of Women in Agriculture

(SAWA) project. Their needs assessment identified a lot of the common barriers to women’s participation on boards and in leadership roles in the industry. One of those barriers is difficulty in breaking into the “old boy’s club.”

Bailey has taken the “old boy’s club” head on. She currently sits on the board of managers of the St. Andrews Society of Winnipeg as its first female board member in its 146-year history. Until two years ago, this Scottish heritage organization had never allowed women to even be members.

Bailey hadn’t realized this when she first applied to join. She’d been simply looking for an organization where she could share her Scottish heritage. She ended up in the thick of a fierce battle that almost ended up in court between those for female membership and those against.

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“Because a lot of women don’t have that voice and the ability to do what I am doing, I feel I owe it to them to do this,” says Bailey

In the end, the vote was in favour and the society changed its by-laws to allow women members. Bailey was the first to sign up and subsequently asked to join its board.

“They had to do a lot of soul searching,” says Bailey. “This incident had very serious implications and it all boiled down to whether or not women should be allowed in this organization. It sounds preposterous, but there were and still are some people who just don’t believe in that.”

Having made the decision, however, the board members who have remained have been supportive and open to change, says Bailey. “They have seen why this is important,” she says. “But, still, it can be challenging to explain to some men, and even some women, why diversity on a board is important, especially when they are very set in their ways.”

Bailey has observed that there’s often a subtle language barrier between men and women that could help explain why some women are reluctant to step

into roles or situations they see as male-dominated. Maybe it comes from social conditioning from an early age, or perhaps it’s just a result of different perspectives or temperaments.

Whatever the cause, men and women definitely seem to speak the same language in very different ways, and Bailey has seen evidence of that throughout her career.

“I’m very comfortable with the learning curve that comes along with a new position, and that can include language,” says Bailey. “But I think there are environments where men use certain terms, and they’re very confident of the words and phrases that they use. Whereas women may use other terms, meaning the same thing, but they come across as less assertive or willing to speak up.”

As an example, working in agricultural equipment parts sales taught Bailey the differences between the men and women who came looking for parts. “A lot of men would come in and have no idea what the real part name or the tool was, but were confident that what they called it was correct,” she says. “Even if someone with more technical knowledge corrected them, they were insistent that the part was what they knew it as. That same part could be called a number of different things depending on the region the person came from, their age or their gender. So I think language has a big part to play in whether we really understand each other.”

Women completing the SAWA survey also cited career and family responsibilities and a lack of female role models and mentors as factors in why women aren’t as prevalent in the boardroom as men.

Bailey also had a feeling that she would fit in well on the MCGA board. Even though her knowledge of canola is limited due to her Atlantic Canadian roots, she’s there at the board level to learn in depth about the industry in order to support and grow it. She did her homework and found that the board has practices and policies in place that can assist her to achieve these goals and she hopes she can also inspire more participation by women in the governance of agricultural organizations.

“For example, the MCGA has a board orientation and ongoing leadership development process, and those are signs of a good board,” she says. “I know that even as a rookie at the table, I can help the organization achieve its goals while still satisfying my personal leadership growth.”

According to the 2016 Census of Agriculture, almost 29 per cent of farm operators are women, but there are a lot more women involved in agriculture than that. Bailey is hopeful that by women taking leadership roles and being more active on boards and in associations, it legitimizes all women in agriculture. “I would like to see more participation, be a role model and foster women or anybody to be more involved in agriculture at a decision-making level,” she says.

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PHOTO: CHRIS PROCAYLO



Compaction and tire pressure

written by Catherine Van Arkel

Over the years, we've seen farm sizes increase and as a result, in an effort to complete field work in a timely manner, farmers have increased the weight and size of their equipment along with tractor horsepower. In the 1940's, tractors weighed about 3 tons; whereas today that weight has increased to up to 18 tons. It follows then that soil compaction is becoming a pressing issue.

The difficulty is that soil compaction is insidious. It may not be noticeable immediately but over time it wreaks havoc.

Technology such as CTIS (central tire inflation systems), has made it easier to inflate and deflate tires on the go from the comfort of a tractor cab. Jake Kraayenbrink owner of Agribrink agrees as his on-the-go tire pressure adjustment system (CTIS) is able to deflate a 30.5R 32 tire in 20 seconds, thereby increasing its footprint by 62%. GPS technology is also able to measure tractor speed and alert the operator to inflate tires. If there is a concern about the cost of this technology, Kraayenbrink states, "the cost or return on investment can be seen when farmers realize the

At the Innovative Farmers Association of Ontario's (IFAO) Compaction Action Day last fall, Matthias Stettler, a researcher and lecturer at Bern University of Applied Sciences in Switzerland, presented his compaction findings. Based on his research he has found that tire inflation pressure is the most important factor in managing topsoil compaction. By completing stress tests using sensors buried 6 inches into the soil and with tires inflated to above 15 psi, he noted that compaction occurred at the root zone. This alone can cause up to a 5% yield loss annually which can accumulate to a 20% yield loss in the long term.

Another factor to consider is axle load. Marla Riekman a Provincial Land Management Specialist from Manitoba finds that deep compaction is related to axle load. Grain trucks with narrow tires are being replaced with larger grain carts resulting in compaction to as deep as three feet.

The quality of an agricultural tire, like radial tires, lies in its ability to carry heavy loads at very low tire pressure. Both experts and researchers agree that there is no simpler way to improve tractor efficiency than to use proper tire inflation pressure. It will also reduce the force applied to the ground by spreading out the weight of a load over a larger area; that is, increasing the tire's footprint.

cost of yield losses due to compaction. Managing compaction is also costly." With optimal use of CTIS, Stetter determined that a 15% savings in fuel and 20% longer tire life can be realized.

So, what is the take home message? Tire company, Michelin recommends using radial tires vs bias tires and to opt for wide and large volume tires. Stettler goes further by having you consider two principles. First, strengthen your soil's aggregate structure by reducing tillage, having a permanent soil cover, and adopting an effective crop rotation. These actions will increase organic matter and improve your soils aggregate structure. Secondly Stettler suggests using what he terms soil protecting equipment. Consider high volume tires; increase your tire footprint by decreasing tire pressure in the field to less than 15 psi; distribute your load onto as many tires as possible; avoid individual wheel loads greater than five tons, and axle loads greater than ten tons; and control the traffic in your field to minimize damage.

There are lots of resources to take advantage of if you want to research this topic further. Our website at www.ifao.com has a series of short, informative videos on compaction. And another interesting resource is Terranimo, a computer model that you can use to predict the risk of soil compaction by your farm machinery. It too is available online at www.terranimoworld.com.

***Check out our compaction video series and compaction stress measurement data.
www.ifao.com***



“Boards aren’t representative of who is out there farming,” says EastGen director Amanda Jeffs

“It’s easy to talk for myself about what my barriers were and what I had to overcome but I find with farming everyone’s experiences are different,” says Amanda Jeffs, who was recently appointed as the first woman on the board of directors of EastGen, a farmer-owned, not-for-profit organization dedicated to dairy genetics.

“It’s definitely harder when you are worried about child care, and I think women feel that they need to fulfil all their roles as best they can,” says Jeffs. “I want to always make sure I am a good mom, but I also need to make sure my farm is running the way it should, and if I am going to be on a board I also need to be committed and make sure I am putting my work in there. So it’s comes down to whether or not you think you can juggle it all.”

MAKING IT ALL WORK

Thirty-two-year-old Jeffs grew up on the family dairy farm in Stirling, Ont., serving on the local fair and other boards. After taking her animal biology degree at the University of Guelph, she went straight back to the

third-generation dairy she operates with parents, Fred and Taleana and brother, Andrew.

Jeffs had to make sure it was going to work with the farm and her family before she made any commitment to the EastGen Board. As she soon found out, it’s a big time commitment. She spends at least 12 days a year away from the farm at meetings, then there are the many hours spent reading correspondence and preparing for meetings, as well as several conference calls a year that take at least a couple of hours each.

With two young children; Natalie (five) and Brent who is almost two, it’s not easy. Husband Luke owns a custom manure spreading business, so is often away from the farm, but the family all pitch in to help, and the board is very conscious that it needs to accommodate its farming members.

“A lot of the board meetings are December to March, which works out well for us, as Luke is home more during those months,” says Jeffs. “The board does try to plan our meetings around a farming schedule, so for example,

after the first cut of crops and before we have to do the second cut. If we need a conference call and we see the forecast is for rain, we'll schedule it for that day instead of a day when we could be planting."

Bailey, at the moment, has the flexibility and time to dedicate to serving the broader agricultural community, but she also faces the same day-to-day challenges that other women face. She reflects how so often on the farm no one hesitates to bring in outside help to build a new barn or insulate a shed even if the family or farm workers could do the job themselves, but will balk at paying someone to babysit the kids for a couple of hours or do some light housework.

"One of the biggest banes of my existence is dishes or laundry, and it takes time to do those things, but it's okay to ask for help. Asking someone else to pitch in, or spend \$20 or \$30 a week so those chores get done. It can be a spouse, a child, a neighbour, or professional," she says. "A women's plate is already full, but if being part of a board is something she wants to do, something needs to come off her plate, and that's when it's time to delegate it out. And don't feel guilty about doing it."

BOARDS ENCOURAGING DIVERSITY

Despite the barriers and all the juggling, more and more women are making the time and space for themselves to be able to add their voice at the governance level of organizations and groups shaping the future of agriculture. At the same time, progressive and effective boards understand the importance of having different perspectives at the table. That doesn't just mean from women, but young people, and different ethnicities, and some

boards and organizations are working to create inclusive policies and recruit for diversity in their ranks.

To a certain extent, as a woman in agriculture, Jeffs says she often feels she has to fight for her place in the industry, but the EastGen Board is one place she feels respected and valued. "The first day I walked into the boardroom someone said it's so nice to have a woman on the board because women have a different perspective than men, and I think that's true, and I think that's regardless of who is on the board," she says. "Everyone's opinion is definitely recognized and validated. I got lucky. I am on a really great board."

Jeffs is also thankful that she had taken some leadership courses prior to joining the EastGen board, because they have helped her to prepare for a higher level governance role. She also gives EastGen a lot of credit for making every effort to help her understand her role and be prepared, including allowing her to shadow meetings for a few months before she officially joined the board in March 2017.

Jeffs recommends women interested in a board role should consider taking some kind of leadership training and get as much practical experience as possible. "I would say get out there, go to lots of meetings, get your name out there," she says. "I don't think a woman should be on a board just because they are a woman, but everyone should ensure they're putting the work in and understand what's going on. Most boards aren't representative of who is farming nowadays. There are a lot of women that are farming on their own, with partners, or parents, so it would be great if our boards and companies represented that." **CG**



PHOTOS: DEB DEVILLE

BOARD BUSINESS

A board wants you to sign on as a director, but is it the right board for you? Watch for these signals

BY ANGELA LOVELL

Today, you feel it's a board that you could maybe help. Admittedly, that wasn't quite the way you felt after you first showed up at one of its meetings, returning to the farm totally frustrated. All the directors seemed to have been there forever. They struck you as stale and apathetic, just going through the motions, rubber-stamping everything and looking at change or new ideas as simply too much effort.

Now, you're wondering: if you got involved, could you help you re-energize a board like that?

How do you change it into a board that's dynamic, that gets down to work, and that attracts the diverse kind of people it needs to get things done?

It turns out your best move might be to let them know how deep your doubts run.

"Getting its house in order is something that a board can do to make sure that it is attractive, well run, has good practices for decision making and all of the things that make a board strong," says Leanne Sprung, a rural leadership specialist with Manitoba Agriculture, who is part of a provincial team that offers board training resources to ag organizations.

"An organization that clearly knows what it wants makes it easy for someone joining to know the purpose of that organization... Organizations don't survive if they don't look at new interests and attract new people."

BOARDS NEED TO SELL THEMSELVES

Unfortunately, a lot of boards don't do a good job of selling themselves to potential board members, or of recruiting and engaging the people they need to keep moving forward. Making the board room an attractive place to be can be hard for some organizations, but it starts with being intentional about its purpose and creating a corporate culture that makes board members feel valued.

"The board needs to see its purpose as broader than merely regulatory compliance, and that it is making a valuable contribution to the organization," says Abe Bergen, board chair of Southern Health-Santé Sud, a regional health authority that serves a large area of southern Manitoba and has a governing board of 12 members from different communities, age demographics and walks of life.

"It is critical when recruiting or welcoming new board members to be able to say, 'this is what this board is about and here's where we think you would make a valuable contribution,'" Bergen says, adding "It's helpful to identify the diversity with which you want to formulate the board."

On any board it's useful to have a diversity of skills and experiences, but many boards have difficulty understanding what they need, which is why, when Sprung and her colleague Tracey Drabek-Zirk are approached by an organization to assist with board issues, they begin with a self-assessment to identify the board's purpose and goals.

"The board will look at what is their purpose, their vision, their shared beliefs and values, their strategic planning and what their goals are for the organization," says Sprung. "It's a diverse tool that provides a foundational starting point from which to set priorities."

IDENTIFYING THE MISSION AND VISION

Having a clearly defined mission and vision is certainly an important starting point for any organization, as well as identifying the skills and strengths that its board members have and those that it needs to recruit.

"Often when people are asked to serve on a board, they really don't know what the mission or the vision of that board is," says Drabek-Zirk, who is also a rural leadership specialist with Manitoba Agriculture. "If that is not strongly known or hasn't been identified, I would suggest to that board

that they do a strategic planning session to determine what their mission and vision is because every activity that board or organization undertakes should serve that mission and vision."

Once the mission is identified, the board needs to set milestones to help achieve it "When organizations can identify what their goals are and what they want to accomplish in three months, six months or a year, they can see their progress and how it fits into the overall picture," says Drabek-Zirk. "It provides clarity and the board doesn't waste time on things that aren't part of the focus for the organization."

Another barrier for many boards is committing to an ongoing review process once they have completed a strategic planning exercise. Identified priorities and areas for continuous improvement can get lost in the regular board business unless there is a commitment to review aspects of the board's responsibilities on a regular basis.

"We recommend reviewing the policy and procedures manual within a certain time frame, say three years, but it need not be done all at once," says Drabek-Zirk. "The board can take a policy a meeting and have a discussion about it. People don't have to question what the policy is if they've just spent 10 minutes looking at it and having some dialogue about it. The organization's ability to make this process manageable can carry the organization a long way in attractiveness to busy board members."

RECRUITING AND KEEPING THE RIGHT PEOPLE

Certainly one of the gaps that Sprung often sees with organizations is a recruitment plan that ensures people understand if they have the skills and abilities that are needed. The first step is for the organization to have its needs clearly defined. Job descriptions for board members are a great tool to help do that. "Quite often boards do not take the time to decide what their needs are," says Drabek-Zirk. "If a job description is written for the need, when there is an upcoming election or call for board positions, they can look for people who fit those needs."

By posting the board job descriptions as part of the recruitment or nomination process, people with those skills may be encouraged to apply if they understand

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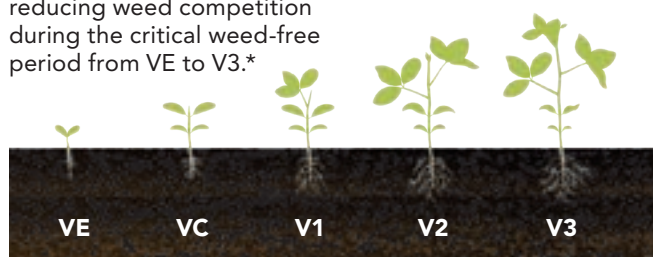
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¹Data from Purdue Extension Weed Science and Ohio State horticulture and crop science extension fact sheet "The benefits of Preemergence herbicides in Roundup Ready soybean" April 2008.

*Fickett et al., 2009, Jeschke et al., 2011, Ali et al., 2013

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	<div>USE</div>	<div>Bifecta™</div>	<div>Bifecta™ + BlackHawk™ + Glyphosate</div> <div>Fierce™</div>
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what will be expected of them and see that they have the ability to meet those needs and be an effective board member.

Mentoring is another way to both encourage involvement on boards, and to allow new members to edge comfortably into their roles and responsibilities. Mentorship can take many forms. It can be as simple as an existing board member looking for his or her own replacement. “We know that this happens because we’ve all seen it,” says Sprung. “A board member might identify another young producer in the area, for example, who has shown some interest in some other situation and they may invite them to come onto the board, so there’s some level of mentorship there.”

Unfortunately, there can be a flip side to this because often a person will look only within their own limited network of people for a possible board replacement. That can cause those on the outside to view the board as cliquy, where you have to “know someone” or be part of a certain group to be able to get on that board.

Part of the solution could be for people to find their own mentors. “People may feel intimidated by the idea of serving on a board, but mentoring doesn’t have to be formal, it can simply be calling up someone with more experience and saying, do you have time for a coffee and a chat because I need some advice about how to approach this role,” says Drabyk-Zirk.

ONGOING PROFESSIONAL DEVELOPMENT

Boards that are committed to ongoing professional development and training for members are also much more attractive to potential volunteers who want to achieve some degree of personal growth through their role. “Often boards are so immersed in going through the agenda and getting the meeting done that time isn’t taken for training, yet we know a 10- to 15-minute session at a meeting can open new creativity and efficiency,” says Drabyk-Zirk.

Ongoing professional development and board engagement is something that Southern Heath-Santé Sud’s governing board does very well. “It is something that we do intentionally at every board meeting and it takes a number of different shapes,” says Bergen.

Practices include regular board workshops and an opening exercise referred to as “sacred moment,” a time taken at the beginning of each meeting when board members take turns to lead a moment of reflection, which can take any form: a poem, snippet of a newspaper article, a personal experience or a short video.

“The sacred moment is a way of framing our activities for the day and it shapes our context,” says Bergen. “It provides us that ‘aha’ moment that reminds us why we are here and doing what we are doing.”

Another practice the Southern Health-Santé Sud board does is to evaluate each meeting. At the end of every meeting, each board member fills out an evaluation form, and at the next meeting a board member presents the summary of what was said and how everyone ranked the meeting.

“Initially, that can be intimidating because you’re asking yourselves, have we actually achieved what we said we wanted to achieve? But as that becomes an ongoing piece of the meeting, we continue to ensure that we’re being intentional in our agenda,” says Bergen. “We get past the insecurity or discomfort of those questions and people become both gracious and honest at the same time because we’re being self-reflective at one level individually, but also corporately.”

Bergen, who also serves on a number of other boards, says it’s increasingly being recognized that it’s important for board members to socialize together.

“With one of the other boards that I sit on, we typically meet in the afternoon, have dinner, meet until around nine o’clock, and then sit around and chat for an hour or so,” he says. “It goes way beyond the agenda of

the day, but I find it really valuable and it makes a board fun to sit on.”

BEING FLEXIBLE

Anyone involved in agriculture is busy and there are times when it’s hard to make meetings at all, much less be patient with development or training sessions, which is why Manitoba Agriculture has also developed some brief, pre-recorded webinars about aspects of board governance and leadership that people can view when they have time. This kind of flexibility has proven especially valuable to farm women and youth leaders who volunteer to serve different organizations.

“In cases where women are doing chores, running a combine or doing different things to support the farm business, as well as the domestic and parenting role, the feedback we have received is that it’s given them the flexibility to learn more at a time they could accommodate,” says Drabyk-Zirk.

However a board chooses to structure its ongoing development and training, it takes strong leadership to maintain it. “It takes commitment by the leadership of the board. The chairperson needs to push it, and be committed to it,” says Sprung. “It’s about mindset and changing the culture of the organization.”

Sometimes organizations simply have to make meetings work for the people around the table, even if that means working around different cycles and schedules.

“People may have different community commitments and their stage of family might be different. Maybe one time the board had a beef producer that’s involved with calving in early January or February months and the next time will have a grain producer whose peak season runs from spring to fall,” says Drabyk-Zirk. “Our assessment helped to get some of those conversations started so they could figure out how they can create a way to ensure board members can serve effectively.” **CG**

Online board training and leadership resources:

[//www.gov.mb.ca/agriculture/industry-leadership/being-a-board-member/](http://www.gov.mb.ca/agriculture/industry-leadership/being-a-board-member/)

[//www.gov.mb.ca/agriculture/industry-leadership/resources/](http://www.gov.mb.ca/agriculture/industry-leadership/resources/)

SEED TREATMENT GUIDE

2018 EDITION

WHEAT

OATS

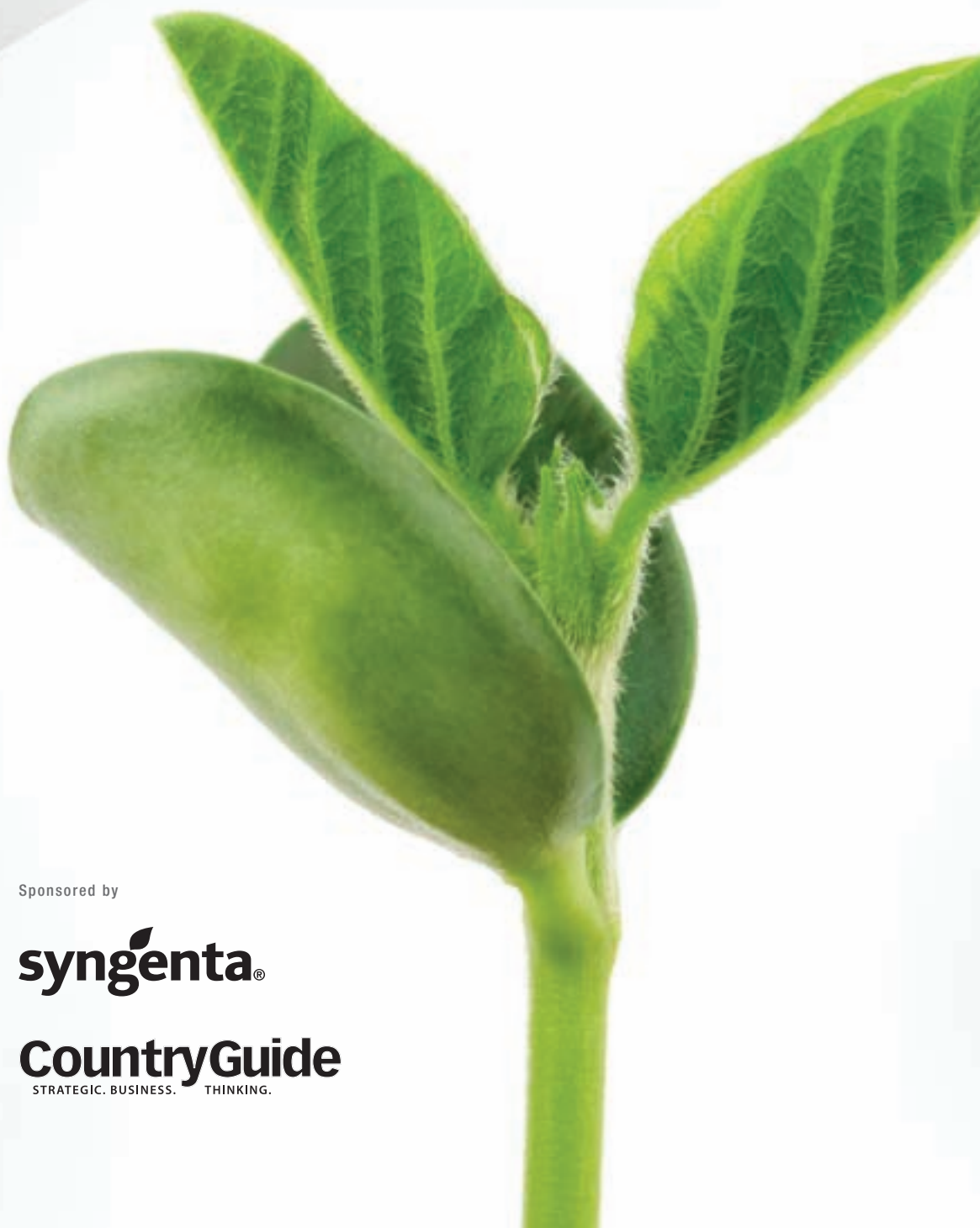
CANOLA

BARLEY

RYE

SOYBEANS

CORN



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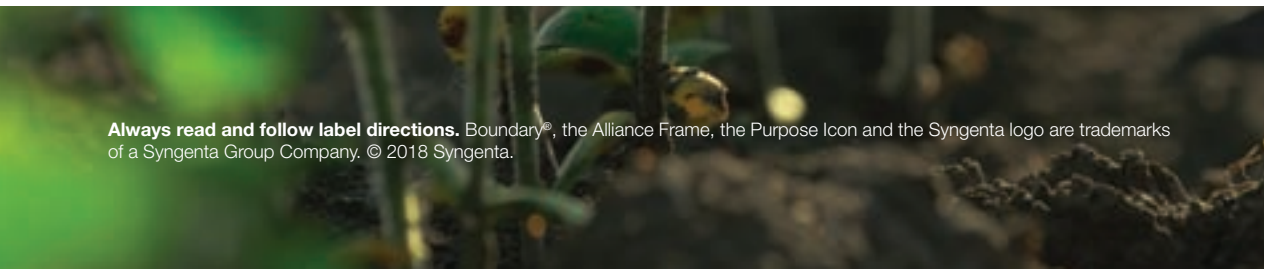
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INTRODUCTION

Many options are available to control pests and diseases. This comprehensive guide of seed treatments can help you make the right choices

By Johanne van Rossum, agronomist

The first step in a sound pest control program is choosing the right cultivar and genetic characteristics. Seed treatments are also important to protect the seed after planting.

This document presents the different seed treatments available for controlling diseases and insect pests. In the table for corn, we have included a list of the genetic traits that can help protect the plant against insects.

To reduce both environmental impacts and the risk of pests becoming resistant to a pesticide, it is essential to know the target pest or organism. Several approaches are often necessary to achieve these goals and ensure optimal yield.

For each of the major field crops listed, we describe the corresponding seed treatments according to their active ingredients and activity against one or more of the main diseases and insects.

This table is for guidance only. Always refer to the label to find the

correct field application rate and to know what restrictions must be respected.

There are many possible combinations of seed treatment products, particularly between fungicides and insecticides. Some of these are already premixed by the manufacturer. Many others have not been described in this guide.

Consult your provincial guide to crop protection for direction for safe and effective use of all products.

Please note that most of these seed treatments are only available in a seed treatment facility. Hence, it is important to check with your seed dealers to determine which formulations they use.

To protect insect pollinators, it is vital to take precautions when using seed treatments. For more information on best management practices for protecting pollinators, visit the CropLife website at www.croplife.ca.

WHEAT

WHEAT		INSECT PESTS		SEED-BORNE DISEASES		SOIL-BORNE DISEASES					EARLY-SEASON DISEASES				
COMMERCIAL NAME	ACTIVE INGREDIENT	European chafer	Wireworm	Loose smut	Septoria	Fusarium	Dwarf bunt	Dwarf bunt	Common bunt	Common root rot	Take-all	Seedling blight (Pythium)	Fusarium	Powdery mildew	Septoria leaf blotch
Allegiance FL	metalaxyl	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Apron XL LS	metalaxyl-M	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Belmont	metalaxyl	-	-	-	-	-	-	-	-	-	-	+	-	-	-
Cruiser 5 FS	thiamethoxam	+	+	-	-	-	-	-	-	-	-	-	-	-	-
Cruiser Vibrance Quattro	thiamethoxam + difenoconazole + sedaxane + metalaxyl-M + fludioxonil	-	+	+	-	+	+	+	+	S	S	+	+	-	-
DB-RED L	maneb	-	-	-	-	+	-	-	+	-	-	-	+	-	-
Dividend XL RTA	difenoconazole + metalaxyl-M	-	-	+	+	+	+	+	+	S	S	+	+	-	+ ¹
Evergol Energy	penflufen + prothioconazole + metalaxyl	-	-	+	-	+	-	-	+	S	-	-	+	-	-
Insure Cereal	pyraclostrobin + triticonazole + metalaxyl	-	-	+	-	+	-	-	+	S	-	+	+	-	-
Intego Solo	ethaboxam	-	-	-	-	-	-	-	-	-	-	+	-	-	-
IPCO Vitaflo SP	carbathiin + thiram	-	-	+	+	+	+	-	+	S	-	+	+	-	-
Maxim 480FS, Proseed	fludioxonil	-	-	-	-	+	-	-	-	-	-	-	+	-	-
Nipsit SUITE Cereals	clothianidin + metalaxyl + metconazole	-	S	+	-	+	-	-	+	S	-	+	+	-	-
Nipsit Inside	clothianidin (insecticide only)	-	+	-	-	-	-	-	-	-	-	-	-	-	-
Rancona Pinnacle	ipconazole + metalaxyl	-	-	+	-	+	-	-	+	S	-	+	+	-	-
Rancona Trio	Ipconazole + carbathiin + metalaxyl	-	-	+	-	+	-	-	+	S	-	+	+	-	-
Raxil PRO	tebuconazole + metalaxyl + prothioconazole	-	-	+	+	+	-	-	+	S	-	+	+	-	-
Raxil PRO Shield GO-PACK	imidacloprid + tebuconazole + metalaxyl + prothioconazole	-	+	+	+	+	-	-	+	S	-	+	+	-	-
Sombrero 600 FS	imidacloprid	-	+	-	-	-	-	-	-	-	-	-	-	-	-
Stress Shield for cereals, Alias	imidacloprid	-	+	-	-	-	-	-	-	-	-	-	-	-	-
Vibrance Quattro	difenoconazole + metalaxyl-M + sedaxane + fludioxonil	-	-	+	+	+	+	+	+	S	S	+	+	-	-
Vitaflo 280	carbathiin + thiram	-	-	+	+	+	+	-	+	S	-	+	+	-	-

OATS

OATS		INSECT PESTS	DISEASES				
COMMERCIAL NAME	ACTIVE INGREDIENT	Wireworm	Seedling blight	Covered smut	Loose smut	Seedling blight (Pythium)	Root rot
Allegiance FL	metalaxyl	-	pc	-	-	+	-
Apron XL LS	metalaxyl-M	-	pc	-	-	+	-
Belmont	metalaxyl	-	pc	-	-	+	-
Cruiser Vibrance Quattro	thiamethoxam + difenoconazole + sedaxane + metalaxyl-M + fludioxonil	+	+	+	+	+	s
Dividend XL RTA	difenoconazole + metalaxyl-M	-	+	+	+	+	s
Evergol Energy	penflufen + prothioconazole + metalaxyl	-	+	+	+	+	s
Intego Solo	ethaboxam	-	-	-	-	+	-
Insure Cereal	pyraclostrobin + triticonazole + metalaxyl	-	+	+	+	+	s
IPCO Vitaflo SP	carbathiin + thiram	-	+	+	+	+	s
Maxim 480 FS, Proseed	fludioxonil	-	pc	-	-	-	-
Rancona Pinnacle	ipconazole + metalaxyl	-	+	+	+	+	s
Rancona Trio	Ipconazole + carbathiin + metalaxyl	-	+	+	+	+	s
Raxil PRO	tebuconazole + metalaxyl + prothioconazole	-	+	+	+	+	s
Raxil PRO Shield	imidacloprid + tebuconazole + metalaxyl + prothioconazole	+	+	+	+	+	s
Sombrero 600 FS	imidacloprid	+	-	-	-	-	-
Stress Shield for cereals, Alias	imidacloprid	+	-	-	-	-	-
Vibrance Quattro	difenoconazole + metalaxyl-M + sedaxane + fludioxonil	-	+	+	+	+	s
Vitaflo 280	carbathiin + thiram	-	+	+	+	+	s

CANOLA

		INSECT PESTS		DISEASES					
COMMERCIAL NAME	ACTIVE INGREDIENT	Flea beetle	Cutworms	Seed rot and seedling blight (Aspergillus)	Seed rot and seedling blight (Fusarium)	Seed rot and seedling blight (Rhizoctonia)	Seed rot and seedling blight (Alternaria)	Seedling blight (Pythium)	Blackleg
Allegiance FL	metalaxyl	-	-	-	-	-	-	+	-
Apron XL LS	metalaxyl-M	-	-	-	-	-	-	+	-
Belmont	metalaxyl	-	-	-	-	-	-	+	-
Dynasty 100 FS	azoxystrobin	-	-	-	-	+	-	-	-
Helix Vibrance	thiamethoxam + metalaxyl-M + fludioxonil + difenoconazole + sedaxane	+	-	-	+	+	+	+	+
Helix Vibrance Fortenza Co-Pack	thiamethoxam + difenoconazole + sedaxane + metalaxyl-M + fludioxonil + cyantraniliprole	+	+	-	+	+	+	+	+
Intego Solo	ethaboxam	-	-	-	-	-	-	+	-
Integral Biological ST	bacillus subtilis, a natural bacterium	-	-	-	s	s	-	-	-
Lumiderm	cyantraniliprole	+	+	-	-	-	-	-	-
Maxim 480 FS	fludioxonil	-	-	+	+	+	-	-	-
Nipsit SUITE Canola	clothianidin + metalaxyl + metconazole	+	-	-	+	+	-	+	+
Nipsit Inside	clothianidin (insecticide only)	+	-	-	-	-	-	-	-
Nisso Foundation Lite	iprodione + thiram	-	-	-	-	+	+	-	+
Poncho 600 FS	clothianidin	+	-	-	-	-	-	-	-
Prosper Evergol	clothianidin + penflufen + metalaxyl + trifloxystrobin	+	-	-	+	+	+	+	+
Vault	acetamiprid	+	-	-	-	-	-	-	-
Visivio Co-Pack	sulfoxaflor + thiamethoxam + difenoconazole + metalaxyl-M + fludioxonil + sedaxane	+	-	-	+	+	+	+	+

LEGEND +: recommended

pc: partial control

-: not recommended

s: suppression

NOTE 1: Winter wheat only.



Protecting Pollinators on the Farm

Bees are vitally important to the sustainability of agriculture. At least one third of the human food supply from crops and plants depends on insect pollination, most of which is performed by bees. The estimated value of their contribution to Canadian agriculture alone is as much as \$2 billion.

Farmers are well known to be excellent stewards of the land. Following Best Management Practices will help maximize the benefits of seed treatments while also protecting bees around farm operations.

As always, when handling any crop protection product, it is important to start by reading and following all label directions.

Best Management Practices* (BMPs) are approaches based on known science that, when followed, support healthy crops, healthy bees and a healthy environment.

* BMPs developed in conjunction with CropLife Canada and its member companies.

Best Management Practices

Prior to planting

- Learn about bees that may forage on your land. Know how to contact neighbouring beekeepers.
- Talk to neighbouring beekeepers about protecting bees during planting; discuss alternative locations for hives or ways to shield bees during planting.
- Store treated seed under appropriate conditions, protected from the elements and pests.
- Wear appropriate personal protective equipment (PPE) when handling treated seed.
- Do not reuse empty seed bags for any purpose other than storing the original treated seed.
- Always clean and maintain planting equipment.
- Always use high-quality seed that is free of excessive dust.
- Do not load or clean planting equipment near bee colonies and avoid places where bees may be foraging, such as flowering crops or weeds.
- Check that the planter is set up correctly and calibrated for correct depth and seed placement.
- When turning on the planter, avoid engaging the system where emitted dust may come in contact with honey bee colonies and foraging bees.
- Manage dandelions and other flowering weeds in the field prior to planting to reduce exposure of bees to seed dust.

During planting

- Avoid transfer of dust from the seed bag into the planter.
- Manage lubricants: Lubricants ease seed singulation, improve drop and reduce wear and tear on equipment and seed. A dust-reducing fluency agent is the only seed lubricant permitted for use when planting corn and soybean seed with a pneumatic (vacuum) meter planter.**
** One hundred percent graphite may continue to be used as a mechanical lubricant in finger pickup or mechanical planter meters only. Graphite must not be used in pneumatic (vacuum meter) planters when the corn or soybean seed has been treated with an insecticide.
- Depending on the type of planter, deflectors may be an option to reduce the off-field movement of seed dust generated during planting. Speak with your equipment dealer or manufacturer regarding the availability of deflector kits for your planter.
- Plant at the recommended seeding rate.

- Check headlands, rough areas and the main body of the field for exposed seed. Spilled or exposed seeds and dust must be incorporated into the soil or cleaned up from the soil surface.
- Be aware of wind direction when planting near a source of pollen or nectar for bees (i.e. nearby flowering crops or weeds).

After planting

- Vacuum treated seed from the seed box and return it to the bag from which it came.
- Collect empty seed bags and lubricant packaging and dispose of them according to provincial regulations.
- Do not leave empty bags or left over treated seed in fields.

For more information about these Best Management Practices and bee health, visit www.beehealth.ca



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2018 SEED TREATMENT GUIDE

BARLEY

		INSECT PESTS		DISEASES				
COMMERCIAL NAME	ACTIVE INGREDIENT	European chafer	Wireworm	Seed rot and seedling blight	Covered smut	Loose smut	Fuse loose smut	Root rot
Allegiance FL	metalaxyl	-	-	pc	-	-	-	-
Apron XL LS	metalaxyl-M	-	-	pc	-	-	-	-
Belmont	metalaxyl	-	-	pc	-	-	-	-
Cruiser 5FS	thiamethoxam	+	+	-	-	-	-	-
Cruiser Vibrance Quattro	thiamethoxam + difenoconazole + sedaxane, metalaxyl-M + fludioxonil	+	+	+	+	+	+	s
Dividend XL RTA	difenoconazole + metalaxyl-M	-	-	+	+	-	+	s
Evergol Energy	penflufen + prothioconazole + metalaxyl	-	-	+	+	+	+	s
Insure Cereal	pyraclostrobin + triticonazole + metalaxyl	-	-	+	+	+	+	s
Intego Solo	ethaboxam	-	-	pc	-	-	-	-
IPCO VitaFlo SP	carbathiin + thiram	-	-	+	+	+	+	s
Maxim 480 FS, Proseed	fludioxonil	-	-	pc	-	-	-	-
Rancona Pinnacle	ipconazole + metalaxyl	-	-	+	+	+	+	s
Rancona Trio	Ipconazole + carbathiin + metalaxyl	-	-	+	+	+	+	s
Raxil PRO	tebuconazole + metalaxyl + prothioconazole	-	-	+	+	+	+	s
Raxil PRO Shield	imidacloprid + tebuconazole + metalaxyl + prothioconazole	-	+	+	+	+	+	s
Sombrero 600 FS	imidacloprid	-	+	-	-	-	-	-
Stress Shield for cereals, Alias	imidacloprid	-	+	-	-	-	-	-
Vibrance Quattro	difenoconazole + metalaxyl-M + sedaxane + fludioxonil	-	-	+	+	-	+	s
VitaFlo 280	carbathiin + thiram	-	-	+	+	-	+	s

RYE

		INSECT PESTS	DISEASES					
COMMERCIAL NAME	ACTIVE INGREDIENT	Wireworm	Seedling blight	Seed-borne Septoria	Common bunt	Dwarf bunt	Seedling blight (Pythium)	Root rot
Allegiance FL	metalaxyl	-	pc	-	-	-	+	-
Apron XL LS	metalaxyl-M	-	pc	-	-	-	+	-
Belmont	metalaxyl	-	pc	-	-	-	-	-
Cruiser 5FS	thiamethoxam	+	-	-	-	-	-	-
Cruiser Vibrance Quattro	thiamethoxam + difenoconazole + sedaxane + metalaxyl-M + fludioxonil	+	+	-	+	+	+	s
Dividend XL RTA	difenoconazole + metalaxyl-M	-	+	+	+	+	+	s
Evergol Energy	penflufen + prothioconazole + metalaxyl	-	+	-	-	-	+	s
Insure Cereal	pyraclostrobin + triticonazole + metalaxyl	-	+	-	+	-	+	s
Intego Solo	ethaboxam	-	-	-	-	-	+	-
IPCO VitaFlo SP	carbathiin + thiram	-	+	-	-	-	+	s
Maxim 480 FS, Proseed	fludioxonil	-	pc	-	-	-	-	-
Rancona Pinnacle	ipconazole + metalaxyl	-	+	-	-	-	+	s
Rancona Trio	Ipconazole + carbathiin + metalaxyl	-	+	-	-	-	+	s
Vibrance Quattro	difenoconazole + metalaxyl-M + sedaxane + fludioxonil	-	+	+	+	+	+	s
VitaFlo 280	carbathiin + thiram	-	+	-	-	-	+	s

LEGEND +: recommended pc: partial control -: not recommended s: suppression



CORN

		INSECT PESTS							DISEASES				
COMMERCIAL NAME	ACTIVE INGREDIENT	Corn rootworm	European chafer	Wireworm	Seedcorn maggot	Black cutworm	Corn flea beetle	Armyworm	Seedling blight (Fusarium)	Seedling blight (Rhizoctonia)	Seedling blight (Pythium)	Aspergillus	Penicillium
Acceleron for corn	clothianidin (0.250 mg a.i./seed) + ipconazole + trifloxystrobin + metalaxyl	-	+	+	+	+	+	-	+	+	+	+	+
Acceleron for corn with Lumivia	chlorantraniliprole + prothioconazole + fluoxastrobin + metalaxyl	-	-	+	s	+	-	+	+	+	+	+	+
Acceleron for corn without insecticide	ipconazole + trifloxystrobin + metalaxyl	-	-	-	-	-	-	-	+	+	+	+	+
Allegiance FL	metalaxyl	-	-	-	-	-	-	-	-	-	+	-	-
Belmont	metalaxyl	-	-	-	-	-	-	-	-	-	+	-	-
Cruiser Maxx Corn 250	thiamethoxam + azoxystrobin + fludioxonil + metalaxyl-M + thiabendazole	-	+	+	+	-	+	-	+	+	+	+	+
Cruiser Maxx Corn 1250	thiamethoxam + azoxystrobin + fludioxonil + metalaxyl-M + thiabendazole	+	+	+	+	-	+	-	+	+	+	+	+
Fortenza Maxim Quattro	cyantraniliprole + azoxystrobin + fludioxonil + metalaxyl-M + thiabendazole	-	+	+	-	+	-	-	+	+	+	+	+
Intego Solo	ethaboxam	-	-	-	-	-	-	-	-	-	+	-	-
Lumivia	chlorantraniliprole	-	-	+	s	+	-	+	-	-	-	-	-
Maxim Quattro	azoxystrobin + fludioxonil + metalaxyl-M + thiabendazole	-	-	-	-	-	-	-	+	+	+	+	+
Nipsit Inside	clothianidin (insecticide only)	+	+	+	+	+	+	-	-	-	-	-	-
Poncho 600 FS (250)	clothianidin (0.25 mg a.i./seed)	-	+	+	+	+	+	-	-	-	-	-	-
Poncho 600 FS (1250)	clothianidin (1.25 mg a.i./seed)	+	+	+	+	+	+	-	-	-	-	-	-
Stamina	pyraclostrobin	-	-	-	-	-	-	-	s	+	s	s	+
VitaFlo 280	carbathiin + thiram	-	-	-	-	-	-	-	+	+	-	-	-

LEGEND

+: recommended

-: not recommended

s: suppression or partial control

2018 SEED TREATMENT GUIDE

SOYBEANS

COMMERCIAL NAME	ACTIVE INGREDIENT	INSECT PESTS					DISEASES				
		Soybean nematode cyst	Seedcorn maggot	Soybean aphid	Bean leaf beetle	Wireworm	Phytophthora rot	Phomopsis seed decay	Seedling blight (Fusarium)	Seedling blight (Rhizoctonia)	Seedling blight (Pythium)
Acceleron for soybean with insecticide	imidacloprid + fluxapyroxad + metalaxyl + pyraclostrobin	-	+	+	+	+	+	+	+	+	-
Acceleron for soybean with fungicide	fluxapyroxad + metalaxyl + pyraclostrobin	-	-	-	-	-	+	+	+	+	-
Allegiance FL	metalaxyl	-	-	-	-	-	+	-	-	-	+
Apron XL LS	metalaxyl-M	-	-	-	-	-	+	-	-	-	+
Belmont	metalaxyl	-	-	-	-	-	+	-	-	-	+
Clariva pn	pasteuria nishizawae	+	-	-	-	-	-	-	-	-	-
Cruiser Maxx Vibrance Bean + Apron XL	thiamethoxam + metalaxyl-M + fludioxonil + sedaxane	-	+	+	+	+	-	+	+	+	-
EverGol Energy	penflufen + metalaxyl + prothioconazole	-	-	-	-	-	+	+	+	+	-
ILeVO	fluopyram	+	-	-	-	-	-	-	-	-	+
Intego Solo	ethaboxam	-	-	-	-	-	+	-	-	-	-
Stress Shield	imidacloprid	-	+	+	+	+	-	-	-	-	-
Vibrance Maxx + Apron XL	metalaxyl-M + fludioxonil + sedaxane	-	-	-	-	-	-	+	+	+	-
Vitaflo 280	carbathiin + thiram	-	-	-	-	-	-	+	+	+	-

CORN

COMMERCIAL NAME	INSECT PESTS									
	Corn rootworm	European chafer	Wireworm	Seedcorn maggot	Black cutworm	European corn borer	Western bean cutworm	Corn earworm	Fall armyworm	
Genetic traits against insects added through genetic engineering										
Agrisure CB/LL	-	-	-	-	-	+	-	-	-	
Agrisure GT/CB/LL	-	-	-	-	-	+	-	-	-	
Agrisure 3000 GT	+	-	-	-	-	+	-	-	-	
Agrisure Viptera 3110	-	-	-	-	+	+	+	+	+	
Agrisure Viptera 3111	+	-	-	-	+	+	+	+	+	
Agrisure 3120	-	-	-	-	+	+	+	-	+	
Agrisure 3122	+	-	-	-	+	+	-	-	+	
Agrisure Viptera 3220	-	-	-	-	+	+	-	+	+	
Genuity Smartstax (Monsanto) / Smartstax (Dow)	+	-	-	-	+	+	-	+	+	
Genuity VT Double Pro	-	-	-	-	-	+	-	+	+	
Genuity VT Triple Pro	+	-	-	-	-	+	-	+	+	
Herculex 1 and Herculex 1/ RR2	-	-	-	-	+	+	-	-	+	
Herculex XTRA and Herculex XTRA/RR2	+	-	-	-	+	+	-	-	+	
Optimum AcreMax / Optimum Intrasect	-	-	-	-	+	+	-	-	+	
Optimum AcreMax Xtreme	+	-	-	-	+	+	-	-	+	
Optimum AcreMax Xtra/ Optimum Intrasect Xtra	+	-	-	-	+	+	-	-	+	
Powercore	-	-	-	-	+	+	-	+	+	

LEGEND +: recommended -: not recommended s: suppression or partial control

The Value of Seed Applied Insecticides: Advanced Seed Protection Technology

Seed Applied Insecticides (SAIs) are one of the most advanced forms of crop protection technology, offering growers a targeted, environmentally sustainable means of pest management. SAI technology protects seeds and emerging plants from insect damage during the critical first weeks of development.



Seed Applied Insecticides enhance crop quality and yield

SAIs protect the seed and seedlings from pests, ensuring that the plants get off to a healthy, vigorous start, which ultimately translates into quality and yield improvements. This protection is key to agricultural production in Canada, as damaging insect pests have been documented in all growing regions of the country for each major agricultural crop.

SAI protection is particularly important in instances where there is no curative option for salvaging plant health after insect damage has occurred.

Seed Applied Insecticides offer numerous environmental advantages

These benefits include:

- A significantly lower amount of active ingredient per acre compared to foliar and soil-applied pesticides
- Direct application to the seed, which minimizes off-target drift

- Reduced impact on non-target organisms, including beneficial insects
- Protection from increased pest pressure associated with a range of agronomic practices including reduced/no-till field conditions

Seed Applied Insecticides also deliver agronomic and production benefits

The value of SAIs extends beyond pest control by:

- Optimizing seeding rates due to improved plant stand
- Minimizing the need for replants
- Extending the application window for in-season, foliar pesticide applications (when needed)
- Supporting earlier planting practices, which helps to maximize labour and production efficiency
- Complementing trait technology to manage insect pests (where there are no traits available to control insect pests and/or to provide a different mode of action for resistance management)

Seed Applied Insecticides deliver benefits even in situations of low-to-moderate insect pressure

Insect pests can cause damage to crop growth, quality and yield, even at low-to-moderate pressures. Small populations of certain pests may have a detrimental effect, with the result that the seedling may never emerge or the health of the plant may be compromised. If untreated seed is put into the ground where pests exist, there is no way to protect the seed retroactively. In either of these scenarios, the crop may have to be replanted at significant cost.

In addition to insect control, SAIs also provide strong plant establishment, health and vigour by protecting and strengthening the plant at crucial times of development (i.e. germination and root growth). This allows plants to better compete with weeds and diseases and deal with abiotic stresses such as cool soil temperatures or dry conditions at planting.

For product-specific information, please visit Syngenta.ca

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syngenta®

Helping hands where and when you need them most

Revolutionary seed treatment insecticide,
inner strength for protection



 **Fortenza®**

syngenta®

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®

PG. 33 After its big gains in the West, FarmLead looks east for its next Canadian breakthrough.

PG. 36 Prostrate knotweed thrives in soils too tight for other weeds. So how best to eliminate it from your crops?

CROPS GUIDE

UAV regs changing – for the better

Transport Canada looks to streamline and standardize the rules for drone use

BY RALPH PEARCE / CG PRODUCTION EDITOR

The growth in the functionality of unmanned air vehicles (UAVs) over much of the past decade has been steady. From the early days when advisers, dealers, agronomists and laboratories purchased and used the units to derive valuable insights into crop performance to more recent sales of much simpler designs for hobby uses, UAVs have made a definite impression on agriculture.

Last November at the Unmanned Systems Canada Conference in Toronto, Transport Canada presented draft changes to regulations governing UAVs. Aspects such as compliance, standardization of regulations across Canada and rules pertaining to the Special Flight Operator Certificate (SFOC) were hard-target changes made to the current regulations. Several proposals were made and will be discussed further before implementation in the future.

Much of the discussion centres on growth in the recreational and commercial operator sector, which has challenged Transport Canada's capabilities. In 2018, for example, it's estimated that SFOC applications will exceed 6,000.

Canada has been a world leader in regulatory initiatives to support the UAV sector, but risks falling behind other nations unless it modernizes its regulations.

Based on a statement from Transport Canada, draft changes are expected by the summer of 2018. Implementation will take "some time," as there will be a transition

period for Transport Canada to put new processes into place and time for industry to adapt.

Why the regulations are changing now, and why this is becoming a greater concern to Transport Canada is because of the steep learning curve. From their inception, UAVs have seen rapidly evolving new uses, wider availability and distribution, and an increased recognition of potential risks to the public from their operation.

Complicating matters is that the proposed regulations recommend new minimum separation distances to aerodromes (airports, grass airstrips and helipads), people, buildings and built-up areas that could severely limit the use of UAVs in areas like southern Ontario. New rules like the minimum nine-kilometre distance to an aerodrome significantly restrict recreational users to small rural areas in southern Ontario.

In the short term, Transport Canada has created a national standard, negating the patchwork quilt of varied applications of the regulations from province to province. The federal department is also streamlining the SFOC application process for potential owners, a move that will hopefully standardize reviews and speed approvals.

Felix Weber and Brian Hall from Ag Business and Crop Inc. attended last November's conference. Despite grumblings about "over-regulation" and a "cash grab" by governments, both are optimistic that the changes will safeguard the public and allow the UAV industry to innovate.

According to Weber and Hall, the process has been proactive, insightful and intended to ease issues and uncertainties, not complicate them. For instance, the process of applying for an SFOC is now routed through one officer based in one centralized office in Quebec.

“Transport Canada is actually being quite good trying to explain the regulations.”

— Brian Hall, Ag Business

CONTINUED ON PAGE 32



As soon as you fly one of those units, you become a liability.”

— Felix Weber, Ag Business and Crop Inc.

Another consideration for this streamlining process is the rise in numbers of people buying a drone, whether for business or pleasure. Many have made their purchase at department stores and Transport Canada was swamped with applications as a result.

It's expected the new regulations will differentiate between recreational and commercial users, with different levels of operation authorized to commercial users depending on their equipment, training and operational requirements. Operations in a controlled airspace will likely be required to meet a higher threshold of capability than non-controlled airspace. Recreational users will be much more constrained in where they can fly.

“Transport Canada is actually being quite good trying to explain the regulations and allow commercial people who are flying to conduct their business,” says Hall, who's based near Stratford, Ont. “They wanted to have a procedure that was standardized across the country, make it streamlined so that people aren't waiting for months, with clear guidelines for anyone flying an aircraft or a UAV to have a clear understanding of Canadian airspace regulations and safety.”

For instance, with so many airports, grass airstrips and helipads now in use, it is impossible to fly without an SFOC in southern, central or eastern Ontario, with an aircraft that's more than 250 grams. Farmers and other rural residents know of local airfields near their farms, so it's understandable that reducing the potential for mid-air collisions, falling UAV units and loss of sight of a unit is a priority for Transport Canada as well. Weber notes that the only place in Ontario where those restrictions are loosened is in the far northern reaches of the province.

THE “L” WORD

Liability is a major concern. Weber says it's really a matter of creating traceability and increasing safety. Liability is also linked to non-compliant aircraft, however, particularly if operators purchase new cameras or other equipment that change the unit's original design specifications.

“If an operator with an eBee UAV with a S.O.D.A (sensor optimised for drone applications) camera wanted to use a Sequoia camera on the unit, that's still compliant because the eBee is designed for that alteration,” says Weber, who's based near Palmerston, Ont. “However, users need to understand that if that same operator chooses to go outside of the eBee distributor and related alteration kit, then it's not a compliant UAV.”

For a lot of farmers, the primary concern with the

Transport Canada regulations upgrade could be “how does this affect my operation of a UAV?” According to Weber, the new directives should actually make things easier for farmers.

“If they buy a compliant unit, they won't have to explain as much about the actual UAV,” says Weber. “As soon as they say they're going to use a compliant unit like an eBee SQ, and attach the compliant document, Transport Canada knows exactly what they're using.”

Interestingly, the hearings last year saw the greatest push back from operators who were either commercial outfits or hobbyists who had altered their units with non-compliant features, or those who had built their own. Transport Canada representatives began to realize that there are a lot of situations — with the film industry, for instance — where operators may have purchased compliant equipment, but needing more advanced, higher-end cameras, had altered the units, thereby making them non-compliant.

OVER YOUR HEAD

Since most UAVs are relatively small, they're not only easy to lose, they're easy to lose sight of.

“As soon as you fly one of those units, you become a liability, and one of the biggest problems is that lots of people don't understand what those risks are,” says Weber. “Transport Canada fines are significant.”

There have been documented cases of drones colliding with the wings of commercial airliners or falling out of the sky crashing just metres behind a World Cup downhill skier.

“What should be the required training and testing of any UAV operator?” asks Hall.

Those who bill themselves as flight instructors will soon have to show diligence in how they've obtained their training and how extensive the training they provide is. “It just brings more credibility to the whole thing.”

Weber and Hall note their instructor has a four-day instruction course on the operation of a UAV, but under the current regulations, someone might promote their capacity to condense that instruction into just two days. Currently, there is no oversight on training or testing.

“Transport Canada isn't trying to kill the industry so people can't use it anymore, they're trying to help the industry to use it in a safe manner, and that's reflected in what they're doing now,” says Weber. “As it's clarified, then everybody knows where they stand, they know the risk, and it helps the whole industry. Even insurance providers will better understand what's happening.” **CG**

The FarmLead revolution

The grain marketing portal eases the task of buying and selling grains and oilseeds by expanding your network

BY RALPH PEARCE / CG PRODUCTION EDITOR

“In an ideal world...” We’ve all heard it, and probably said it too. “In an ideal world, corn prices would be \$5 a bushel or better,” or “In an ideal world, a one-pass glyphosate application would be all that’s needed.”

Obviously, this isn’t an ideal world, particularly in agriculture, where market realities challenge farmers on a daily basis. Yet if a company called FarmLead continues with its development, farmers will be one step ahead in self-marketing their own commodities.

In 2013, FarmLead was first conceived as a means of helping farmers sell their crops for more money.

The design is a simple open forum that brings buyer and seller together.

For the seller, there’s the opportunity to post volumes of grains and oilseeds online to a potentially unlimited number of buyers. For the buyer, there’s a direct line to those growers who can provide exactly what they’re looking for, meeting whatever specs they seek.

For both parties, too, there’s a back-and-forth negotiation process with the goal of arriving at an agreed value.

To date, more than 80 million bushels of grains and oilseeds have been negotiated through FarmLead’s portal, with more than 5,700 users and more than 100 crop categories to choose from. The site has also expanded from its origins in Canada to the U.S., with farmers



The new self-marketing portal is better suited to smaller volume, niche crops, including barley, fababeans or peas.

using the site in more than 40 states. The website’s success is based on two primary considerations: one, that growers are increasingly interested in doing their own marketing, and two, that there are more farmers who have invested in on-farm storage and can take advantage of this online marketplace.

Scott Mowbray is one farmer who’s been using FarmLead for roughly two-and-a-half years to sell grain off his Cartwright, Man. farm. Mowbray’s operation is considered small for Western Canada — about 2,000 acres — his crop production centres around canola, spring wheat and soybeans, and at times has included specialty crops like winter wheat, flax, peas and barley, all of which are marketed on FarmLead. His location just 16 kilometres from the U.S. border actually puts him in good stead

“It (FarmLead) allows us to access some of those markets that don’t trade fluidly in the local area.”

— Scott Mowbray,
Cartwright, Manitoba farmer



CONTINUED ON PAGE 34



When larger processors and buyers begin using a portal such as FarmLead, farmers will have opportunities to market their own soybeans, canola and corn.



using this marketing system. He can market his barley or yellow peas at home in Canada, or he can sell to a buyer in North Dakota or Minnesota.

For Mowbray, using FarmLead provides value in terms of better prices and time savings. Again, owing to his location — within a 90-minute drive of two large-scale canola crush facilities — he finds marketing smaller grains and oilseeds a benefit.

“Price-wise is one of the benefits that we’ve seen, and much more with smaller commodities — ones that don’t trade as fluidly as canola or wheat,” Mowbray says. “I can’t phone my local elevator and get a price for a high volume of barley every day of the week. It allows us to access some of those markets that don’t trade fluidly in the local area. And because of that, you have multiple buyers that are all interested.”

As for the time savings, Mowbray says that he no longer has to spend a day or two playing phone tag with a handful of potential buyers. Now he can post his volumes online and has access to dozens of potential customers. He can also use FarmLead to sell old and new crop production.

If — or when — FarmLead attracts some of the larger players in grain marketing — Richardson or Viterro in the West, Bunge or Casco in the East — farmers would be able to market virtually anything online, adds Mowbray.

BROADENS THE MARKET

That’s the purpose and the goal, according to Alain Goubau, one of FarmLead’s founders. Growing up in Eastern Ontario where he continues to farm, Goubau, along with co-founder Brennan Turner, wanted to help farmers engage in their own grain marketing and do it with more confidence.

“It helps — particularly producers — to really maximize the number of buyers they can deal with at any given moment, for any broad-acre crop that they may be producing,” says Goubau. “We go with the classic corn, soybeans and wheat, but also all of the specialties: edible beans, pulses, specialty oilseeds. And for the buyers, it helps them more efficiently access the grain that they’re potentially in a position to buy in a particular region or area or at a particular time of year when they’re looking to buy a certain type of grain.”

Participants create accounts and set up listings of grains that are to be bought or sold. Negotiations are conducted free of charge, and FarmLead makes money only after the sale is made, once buyer and seller agree on the transaction. It’s at that point that FarmLead takes a commission, depending on the volume of grain being sold or purchased, and in broad terms, it’s a fraction of what a broker would charge.

“We charge the buyer and seller equally, because we don’t really work for one side,” says Goubau. “What we’ll charge is a dollar per tonne for the first 80 tonnes, and 25 cents per tonne above that.”

“We charge the buyer and seller equally, because we don’t really work for one side.”

— Alain Goubau, co-founder, FarmLead

On a per bushel basis, it works out to a little more than a cent per bushel for the first 2,000 to 3,000 bushels, depending on the crop, and less than half a cent per bushel beyond that. There’s no distinction between a more mainstream crop and one that’s a specialty, adds Goubau. In fact, quantity doesn’t matter: the platform puts everyone on a level playing field, and the marketplace is making a grain deal based on numbers: price, specific volume, location, distances, freight and quality. It’s a simple formula that’s designed to give more exposure to buyers and sellers.

The only caveat is that all buyers participating in FarmLead undergo a credit check, and the portal constantly monitors the credit quality and performance and behaviour on the site. And every farmer who’s used this platform has been paid.

ADDS TO ON-FARM DIVERSITY

The exposure to sellers is the biggest plus as far as Mowbray is concerned, and it has helped him diversify his crop rotation. He has considered marketing his canola using FarmLead but concedes that the two crush plants nearby provide him with good returns already. It’s actually with his niche crops that he’s seen the most benefit.

“I’ve learned that there’s a potential for growing these niche crops,” he says, referring to yellow peas and barley (the fababeen potential hasn’t matured sufficiently for Mowbray). “I wouldn’t have wanted to touch some of these crops five years ago because that would be my biggest concern. There might be a couple of buyers in Manitoba, but can I sell it when they want to buy it? Now I have access to all of these buyers at the same time, and I feel much more comfortable knowing some of these crops.”

It’s not that he wants to expand the acreage on his specialty crops; as long as he’s just down the road from the crush plants, Mowbray reasons the need to move canola via FarmLead just isn’t there. But the self-marketing option for posting his grain to an internet-wide network of potential buyers is similar to transforming conventional shopping to an online model like Amazon. He’s dealing in a much larger world now.

“We’re not a big farm, so we have to be a little more nimble than others and be able to take advantage of things like FarmLead to be able to make up for the fact that we don’t have the same economies of scale that others do.” **CG**

The next step for FarmLead

Last October, executives with FarmLead launched another valuable online tool, GrainTests.com, which provides buyers and sellers of grains and oilseeds with a listing of third-party laboratories from across North America. The launch adds a level of traceability to the demand for quality parameters in the volumes under negotiation.

It helps ensure farmers are offering specific traits and characteristics for potential buyers. For buyers, it’s an opportunity to ask about fusarium or vomitoxin levels in a crop. Or if they’re looking at high-quality milling wheat, they might want to know about falling numbers.

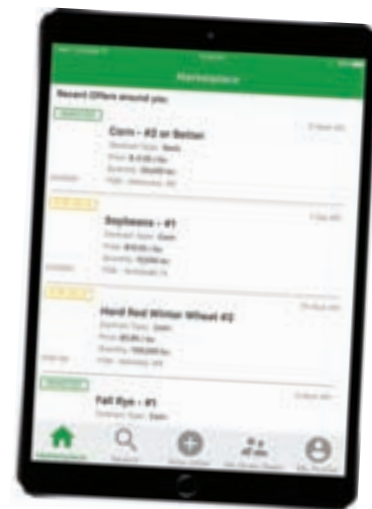
It’s not a reinvention of the wheel in grain-testing services; FarmLead has simply made it easier for the producers to access those laboratories. Preparing and ordering grain samples can be done online, whether it’s for multiple tests for a commodity, multiple samples or multiple commodities.

“Then what we do is give you a very clear recap, for each of your samples — this is what you write on it, this is who you’re sending it to — and then we have a good turnaround with the third-party labs,” says Alain Goubau, co-founder of FarmLead. “The lab sends the results back to the producer and if they need to refer to them later, we also make sure that we keep a copy for them.”

Farmers are urged to get their samples tested — it just makes it that much easier in the negotiation process. He adds that it’s the opportunity for growers to have their own view of they’re offering, without relying on some other service provider who might be involved in the process of buying a grower’s grain.

“We like to say paying \$25 or \$50 to test \$30,000 or \$50,000 worth of grain is a very smart investment in that grain,” says Goubau, who also farms in Eastern Ontario. “It’s about driving the habit of self-marketing a crop. I know that if I’m selling wheat, it’s probably good to get the basic grading done and a couple of the key factors, either the protein level indicators, moisture indicators and the toxin indicators, because those will be the very first questions the buyers will ask when they’re looking at the grain.”

For more information go to:
farmlead.com
graintests.com



Users can provide the necessary details on their crops on FarmLead’s website.

#PEST PATROL

with Mike Cowbrough, OMAFRA

Tackling prostrate knotweed on today's farms

Q: How do I get rid of prostrate knotweed in each of my major crops?

A: In Ontario, prostrate knotweed is more frequently found in Huron County and on Brookston clay-loam soils under no-till or minimum-till production systems (Frick, 1990). It can thrive in compacted soils where other plants will struggle to grow well. Below is a breakdown of management strategies that have provided the most success to date.

CORN: Prostrate knotweed is typically not a problem in corn because primary and secondary tillage remove the weed. Atrazine will provide good control when applied prior to the emergence of prostrate knotweed. Once emerged, Distinct can provide good control in conventional corn, while glyphosate (360 g/l) applied at two l/ac. is about the best you can do in glyphosate-tolerant crops (Hefty and Hefty, 2009).

SOYBEANS: Metribuzin (e.g. Sencor) has provided the best control of prostrate knotweed in Ontario trials (Hamill et al., 2000). Only one replicated study in Ontario has evaluated post-emergence control of prostrate knotweed. Pinnacle SG was the only herbicide to provide over 80 per cent control. Classic and FirstRate suppressed prostrate knotweed (~70 per cent control) and Reflex provided roughly 60 per cent visual control.

CEREALS: Prostrate knotweed isn't usually a problem in cereals as it doesn't tend to affect either grain yield or harvesting ease. It's likely not a weed worth altering your herbicide program for since a number of the common herbicides will provide some level of control. **CG**

Table 1. Herbicides available in Ontario that list prostrate knotweed as being controlled when applied at the specified stage of weed growth

Product name	Weed stage	Product rate	PCP#*
2,4-D Amine	Up to 4-leaf stage	600 ml/ac.	14762
Enlist Duo	Up to 4-leaf stage	1.72 l/ac.	30958
Lorox Liquid	Prior to emergence	0.9 to 1.8 l/ac.	16279
Rival	Prior to emergence	480 to 920 ml/ac.	18612
Flexstar GT + Turbocharge	Up to 4-leaf stage	1.4 l/ac. + 0.25% v/v	30412

*Source: Pesticide Label Search — Health Canada, //pr-rp.hc-sc.gc.ca/lr-re/index-eng.php. Accessed: December 3, 2016



A young seedling with linear cotyledons at the ideal stage for control with labelled herbicides.



A relatively small seedling plant found in corn during mid-June but beyond the labelled stage of growth.



A mature plant in mid-September.

CITATIONS

Frick, B.L. 1990. Studies on the control of problem weed species in conservation tillage systems.

Accessed: December 3, 2016.

//agrienvarchive.ca/download/sweep_19.pdf.

Hamill, A., Doucet, C., Ferguson, G., Weaver, S., Sikemba, P. and B. Deen. 1999. Control Systems for Problem Weeds in Field Crops. Ontario Research Enhancement Program. Report No. OREP-1999/18.

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//youtu.be/AADpZKDDrK8



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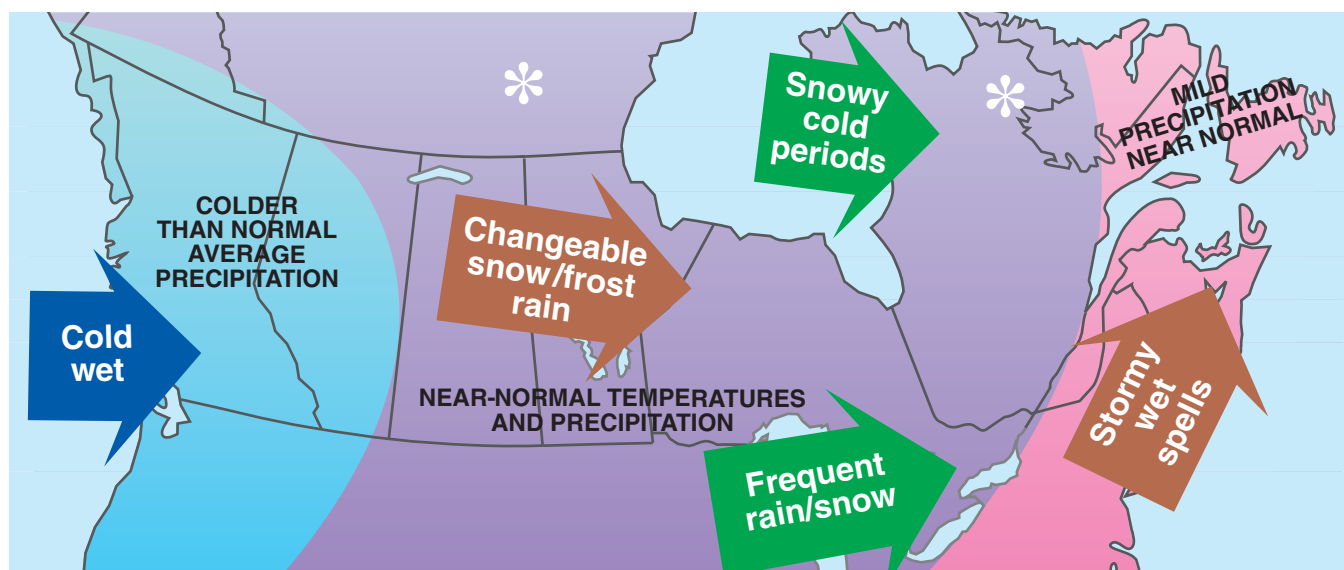
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C-52-02/18-10887603-E

COOLER THAN NORMAL

NEAR NORMAL

MILDER THAN NORMAL



Ontario

- **Mar. 25-31:** Pleasant, mild weather in the south alternates with a few cooler, wet days. Highs hit double digits but with nighttime frost patches. Blustery. Mostly cool north with frequent snow.
- **Apr. 1-7:** Expect variable weather conditions as sunshine exchanges with occasional rain, chance snow in the south. Highs mainly in the teens. Pockets of frost. Seasonable north with intermittent snow.
- **Apr. 8-14:** Often sunny, mild and windy in the south but with occasional rain on two to three occasions, chance heavy in places. Patchy frost central regions. Intermittent rain or wet snow north.
- **Apr. 15-21:** Expect changeable weather with fluctuating temperatures. Sunny skies alternate with occasional rain. Blustery from time to time. Often cool and wet in the north with some snow and frost.
- **Apr. 22-28:** Seasonable to mild except cool near larger lakes. Mainly sunny with gusty winds. Rain occurs on a couple of days this week, possibly heavy in the south. Often rainy, chance snow north.

Quebec

- **Mar. 25-31:** Temperatures fluctuate but average near normal south with patchy frost. Windy at times. Sunshine exchanges with periodic rain or snow. Snow heavier and more frequent in the north.
- **Apr. 1-7:** Expect a few unsettled days this week with some rain or snow south. On fair days, highs reach double digits but with frost pockets at night. Intermittent snow in the north, heavy at times.
- **Apr. 8-14:** Unsettled and changeable with rain or snow on a couple of days turning to heavier snow north. Otherwise often sunny with seasonable to milder readings. A few frosty nights. Occasionally windy.

- **Apr. 15-21:** Frost threatens southern localities on a couple of nights. Variable weather switching from mild and dry to wet and cool. Risk of snow and frost south. Intermittent wet snow in the north.
- **Apr. 22-28:** Sunny with seasonable to mild temperatures overall but look for heavier rain on two or three occasions this week in the south, changing to snow in the north. Gusty winds most days.

Atlantic provinces

- **Mar. 25-31:** Weather and temperatures are changeable. Sunny skies interchange with coastal rain and snow inland, chance heavy in places. Highs above freezing but seasonable to cool inland and north.
- **Apr. 1-7:** Sunshine alternates with rain or snow. Heavier and more frequent snow windward coasts and north. Double-digit highs west, seasonable east. Frost pockets all regions except coasts. Often windy.
- **Apr. 8-14:** Sunshine and milder temperatures interchange with occasional rain, mixed at times with snow and frost inland. Chance of heavy precipitation with strong winds on a couple of days this week.
- **Apr. 15-21:** Several dull, windy days with intermittent rain or inland snow as disturbances move by. Heavier snow north. Seasonable overall with a couple of fair days and milder temperatures.
- **Apr. 22-28:** Expect changeable weather with periodic rain except mixed with snow and frost in northern and eastern regions. Windy. On fair days highs reach double digits but cooler on the coasts.

National highlights

March 25 to April 28, 2018

Springtime in Canada is well known for the wide swings in weather that it brings and for its temperature extremes. This year will be no exception. A lingering La Niña will delay spring's onset somewhat in British Columbia and Alberta due to a cooler-than-usual temperature regime, although despite a couple of heavier rain and snow events, precipitation totals there are likely to run close to normal. From Saskatchewan through Manitoba, Ontario and most of Quebec, meanwhile, weather will be variable but overall temperature and precipitation numbers should end up near normal. In the east, the Atlantic provinces will enjoy a relatively mild circulation with snow and rain totals close to normal values.

Editor's note

Where's my weather page?

Look in every second issue for your month-long *Country Guide* weather forecast during the winter months when we're publishing every two weeks.

Prepared by meteorologist Larry Romaniuk of Weatherite Services. Forecasts should be 80 per cent accurate for your area; expect variations by a day or two due to changeable speed of weather systems.

'FAKE NEWS' AND THE FARM

Politicians may have just caught on about 'fake news,' but farmers have known for years what it's like to live in a world where anything can and does get said and believed. Now, there is a way to counter the din of anti-activists, the food conspiracy theorists, and the faddists. And it may just start with you.

BY MADELEINE BAERG

Just 18 short months ago, almost no one — not politicians, not reporters, not lay people — used the term 'fake news.' Sure, bias and dishonesty have existed in politics, in sales, in industry and in media forever. What's new since the viral spread of the 'fake news' concept, though, is our almost universal belief that fake news is around us everywhere, all the time.

The result? Too many North Americans are willing to disregard facts as 'fake' if they don't align with our personal perspectives.

That's bad news for agriculture unless farmers step up to the challenge of meeting fake news head-on.

No industry is as regularly, as intensively, and often as personally attacked by agenda groups as farming. Depending on where you turn, farmers are painted as alternatively (and sometimes, simultaneously) concealing, poisoning, destroying, abusing, devastating.

If the negative messaging makes you indignant, outraged or anxious, you're hardly alone: farmers across the country and around the world report decreased overall contentment and increased stress associated with farming due to negative online attacks.

Where farmers often go wrong is in directing their anger, frustration and stress towards the everyday consumers who are reporting less confidence in agriculture and the food system. Often, those consumers are simply expressing a need for information. They're victims of the fake ag news, just like farmers.

"In general, the consumer comes at it from a pretty honest perspective. They really do want more information," says Andrew Campbell, a dairy farmer in southern Ontario's Middlesex County, who is the founder of ag advocacy agency Fresh Air Media and the voice behind social media's popular Fresh Air Farmer. "The challenge is if they all go to Google like we all do for everything. Whatever is on the first few pages is what sets their mindset on a particular issue. But what if those first five pages are fake news? Then ag is up the creek."

Luckily, there is a way to help get agriculture back down that creek. Farmers need to guide consumers through the fiction-masquerading-as-fact confusion.

"At different junctures in agriculture we've had to

add different features to our resumé. Now communication is one of those things we need to add," says Campbell.

It comes down to building authentic, trust-based, transparent relationships with consumers.

"Our brains happen to be wired to believe sensational stuff immediately," says Campbell. "But once we have a personal connection, that supersedes the sensational. If you can develop personal relationships — whether one-on-one or on a larger social-media scale, you'll find that people are going to be far more likely to believe the facts that you present than the anonymous fake news page they read online."

Building relationships is about building trust. While that might happen most easily via social media for some farmers, it can also happen after church, during a golf game, or while sitting in the stands at your kid's hockey game. Be proud to be a farmer, and be willing to share the facts that go along with your farm reality.

"When was the last time you had a conversation about what you do on your farm? The people around you already have viewpoints on your production practices; you just haven't had a conversation with them about it yet," says Campbell. "And, chances are you're coming from similar perspectives. You both care about what you feed your kids, about environmental issues, about animal welfare."

So, start the conversation. All it takes is:

• A WILLINGNESS TO BE OPEN AND ACCESSIBLE

Consumers want real information about the things they care about. If you aren't willing to provide quality, timely, honest information, they will collect their information elsewhere.

"I've had people telling me that if they know information is coming from an activist, they take it with a grain of salt. But after they hear it so many times, they can't help starting to think: 'What if it is that way?'" says Campbell. "If you look at trust surveys, farmers are at the top and activists are down around lawyers

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and used car salesmen. But if that's the only person they ever hear from, eventually they'll believe it."

• AN ABILITY TO LISTEN

Consumers are not making up their fears. While the activists and sales people who have stoked the fears are motivated by money, the spark of concern existed before.

"You have to ask where the fake news is coming from? What's made them believe it?" says Campbell. "If you pat them on the head and say, 'Oh, don't worry about that; we've got it taken care of,' you haven't answered any questions. But if you listen to the root cause of why they are concerned... then you can go about answering those specific issues."

• A COMMITMENT TO COMMUNICATING FREQUENTLY

Your marriage, friendships, and working relationships wouldn't survive long if you put in just one session of conversation per month or year, no matter how great the conversation at that time. The same goes for building trust with the wider public.

Anti-ag messaging: it's all about the money

A decade ago, people basically trusted their food and the farmers who created it. Today, there is an epidemic of untruths about agriculture and food swirling around the internet, cropping up in conversations, and having an impact on everything from what people put in their grocery carts to what laws our politicians hang their hats upon.

The average consumer is now three generations removed from a farm. Because they no longer understand the heart and soul of farming, convincing them to accept sensational, fear-based untruths about what agriculture does and doesn't do is easy. And, it can be very, very lucrative.

In the new internet reality, anyone is allowed to broadcast anything they want, founded or otherwise. More importantly, anyone is allowed to profit from those broadcasts, provided they can capture and then effectively translate the attention they receive into product sales, advertising dollars or donations.

"Not knowing anything about (individuals involved in anti-ag messaging), I'm sure they got onto the scene from being concerned. They might have had concerns about big, broad-ranging issues, and they may want to do good at some point. But then all of a sudden they stumble into, 'Whoa, there is money to be made here,'" says Campbell.

It turns out that fear — concocted or otherwise — can earn real money.

In 2014, Vani Hari moved from being relatively unknown to being a leading (i.e. well-known and very well compensated) food and health blogger and activist. Her blog, called Food Babe, achieved viral

readership after she began attacking Subway's use of azodicarbonamide, an FDA-approved dough conditioner, in its bread. Though the same chemical was used with no backlash in hundreds of other bread and bakery products sold from Starbucks to McDonalds to grocery stores, Food Babe specifically attacked Subway's use of the "dangerous chemical."

"If you can't spell it or pronounce it, you probably shouldn't eat it," she was quoted widely as saying at the time.

Hari didn't create the concern about artificial ingredients in food: that already existed. She simply tapped into a lucrative way to benefit from the concern.

"If you choose a specific word that is hard to pronounce, hard to remember, hard to spell, you can convince your audience it must be scientific and it must be worthy of concern," says Campbell. "You just have to know how to pinpoint it."

It's not just individual bloggers who benefit from fanning flames of fear. Advocacy groups and agenda-based organizations might be manned by people with deep convictions who believe they are doing the right thing. But at the end of the day, the organizations have big capital investments, big budgets, big staffs, reminds Campbell.

"How do they make those budgets? By getting big donations. By selling books, selling keynotes, selling natural medicinal products that haven't been tested."

Take it one step further: it's not just individuals or organizations that benefit from fake news. Mega companies like Google and Facebook do too, says Campbell.

Google and Facebook's power and wealth come from just one source: convincing users to spend time on their platforms. People online mean advertising dollars; more people online for longer mean more advertising dollars.

Google and Facebook know the best way to hold your attention is to feed you more of what you already want, already think and already prioritize. So, it uniquely customizes what it shows you based on one's search history, demographic information and a shockingly robust understanding of one's fears, biases, tendencies and priorities. If you're already scared, Google's search algorithm knows you'll keep clicking if it prioritizes articles that build on that fear. If you're already mad, Facebook will make you want to read more by embedded articles and ads that fuel your anger. Designed to serve their business, the algorithms' unintended consequence is they polarize people, amplify fringe voices, and reinforce our (often negative) default opinions.

Is a mom a dupe if she stops sending her son to Subway over concerns about azodicarbonamide? Is the Facebook friend ignorant if he reposts a blatantly wrong opinion piece about farmers' abuse of their livestock? Is the grocery store consumer crazy if he suspects conventional farmers are trying to kill him through chemicals? Actually, no. They're just pawns in a very, very lucrative game. If we can see them as such, we're positioned to open respectful conversations and, ultimately, tackle their fear with fact.



“We’ve got our wish,” says farm social media voice Andrew Campbell. Canadians are listening. So now, he says, “We have to give people the information they need.”

• AND A WHOLE LOT OF GENUINE CARE

“We have to be factual. You can’t make stuff up. But, remember that simply stating and arguing that ‘this is how it shall be’ is never going to get us anywhere,” says Campbell.

“The challenge we have in agriculture now is that, for each one of us, there is no such thing as fact. It’s all perception. You can argue till you’re blue in face about facts, but if someone doesn’t believe you, it won’t matter what you say.”

So, focus on building relationships and showing care. It’s a lot easier for someone to cross to your perspective if you’ve built bridges rather than walls between you.

Campbell believes agriculture is coming around to the idea that communication is the single and only way to counter fake news.

Many farmers used to ask him why he bothered

trying to correct consumers’ food and farming misconceptions, advocate for agriculture, and invest in social media. Then, consumer pressure started to force changes that aren’t in either farmers’ or consumers’ best interests, like restaurant chains that started insisting on new production standards, and governments that started imposing new regulations.

Now, more and more farmers are stepping into the ring alongside him. And, he says, those who aren’t yet willing to speak up for agriculture are no longer so critical of his and others’ ag-advocacy.

“It’s coming. There is growing recognition that those who are participating in the conversation are doing it for good reasons and not wasting their time,” he says.

What a difference a few years make, points out Campbell. Not so long ago, farmers worried that consumers didn’t care about food production and farming realities. Now, consumers clearly care. If we can shift that care into pro-ag advocacy, imagine what an industry we can build.

People are paying attention, Campbell says. “They want to know, which means we’ve got our wish. Now we have to fulfil what we wanted. We have to give people the information they need and build the good will so if we need them down the road, we have relationships in place.” **CG**

ADVISOR VS. ADVISER

Are you sure you should trust the person who is advising you on your financial future?

BY GERALD PILGER

Life, business and farming are all becoming increasingly complicated. As a result, individuals in every walk of life, including farmers, are turning to advisers for help. The public has an expectation that these advisers are highly trained, that they are experts in their field, and that they will work in the best interests of the client at all times.

If only this were true!

Nowhere can it seem that the gulf between the public's expectations and the actual role and responsibilities of their advisers is more pronounced than in the financial services sector.

In October 2016 the Small Investor Protection Association (SIPA), a non-profit, Canadian organization which bills itself as "a voice for small investors" released a presentation entitled: *Advisor Title Trickery: Your Financial Advisor is a Commission Sales Person*.

This report challenges the way persons

employed in the financial services sector represent themselves. It points out many of the titles used by financial advisers may be meaningless at best and borderline fraudulent at worst.

The presentation begins by pointing out the difference between an "Advisor" and an "Adviser." Unfortunately, to most people, the terms are likely synonymous, simply two different spellings of the same word. SIPA refutes this perception and claims there is actually a very big difference. The SIPA paper states:

1. "(The) Securities Acts define an 'Adviser' as having responsibility to look after investors' best interests."
2. "Regulators say 'Financial Advisor' is an unregulated business title that can be used by anyone."
3. "Sales persons are not legally required to look after investors' best interests."
4. "Industry uses the title 'Financial Advisor' for their sales persons to gain trust."

(Note: *Country Guide* uses the CP Style Guide, which calls for the "er" spelling.)

The SIPA report reveals that as of September 16, 2016, of the 121,932 persons registered to work in the investment industry in Canada, only 4,076 (i.e. three per cent) were legally registered as Advisers or Advising Representatives. According to SIPA: "Only four thousand and seventy-six (4,076) persons are registered in the category where a true fiduciary professional responsibility is legally required to be delivered to you as the investor."

The SIPA presentation warns investors: "Keep in mind that although recent studies show that almost all investors trust their 'financial advisor,' most investors are not aware that there is no statutory requirement for fiduciary duty or looking after clients' best interests, and they are generally registered as 'Dealing Representative — A sales person.'"

FINANCIAL DESIGNATIONS

The Investment Industry Regulatory Organization of Canada (IIROC) is the national, self-regulatory body overseeing investment dealers and firms dealing in Canadian equities. IIROC sets and enforces the rules governing the way dealers and firms and their employees operate and conduct business.

Even IIROC distinguishes between the designation "advisor" and any recognized registration. The IIROC website states: "'Advisor' is not, however, an official IIROC approval category for individuals working at IIROC-regulated firms and is not being used to represent an official registration category."

Instead, IIROC recognizes 68 different financial certifications and registrations in Canada. And you thought advisor and adviser were confusing!

Thankfully, the IIROC website includes a searchable database of Canadian investment dealers and their approved employees and agents. The website allows anyone to find out the true meaning of the financial title of an advisor and the extent of training that must be completed to obtain that designation.

So if you are wondering what those initials behind your advisors names on their business card mean, or if you have questions about the training he or she received to earn that impressive framed certificate hanging on their office wall, the IIROC database provides you with the means to find out.

Furthermore, you can search the IIROC database by an advisor's name to ascertain

As an example, the Smart Certificate is a financial certification recognized by IIROC. A search of the IIROC database www.iiroc.ca/investors/UnderstandFinCert/Pages/default.aspx provides the following information about the Smart Certificate certification:

Smart Certificate	
Certification	Smart Certificate
Acronym	None
Issuing organization	Smarten Up Institute
Certification status	Currently offered and recognized by the issuing organization
Prerequisites/experience required	None
Educational requirements	Students receive a Smart Certificate upon successful completion of any one (1) course within a general category and confirmed attendance of any six (6) Smart Talk events.
Exam type	Classroom: a combination of multiple choice, true/false, and applied concept questions. Online: multiple choice and true/false
Continuing education	No
Investor complaint process	No
Public disciplinary process	No
Check professional's status online	Yes, email: registration@smartenupinstitute.com

if they have the accreditation they claim, any additional certification or training they have undertaken, as well as any disciplinary action taken against them.

CANADIAN SECURITIES ADMINISTRATORS

Hey wait, I just searched IIROC and my adviser is not listed!

Before you panic, you need to know that IIROC is not the only financial regulatory body in Canada. Other financial regulatory bodies include the Portfolio Management Association of Canada (PMAC), the Financial Planners Standards Council (FPSC), and Mutual Fund Dealers Association. As well, eight provinces have their own security regulatory commissions.

The Canadian Securities Administrators (CSA) is the umbrella organization of provincial security commissions and its website carries this warning: "An individual's or firm's registration category tells you what products and services they can offer. Being registered, however, doesn't mean that all firms and individuals have the same skills, provide the same services or charge the same fees. Make sure you understand their qualifications and the products or services that they can provide."

The CSA website, like IIROC, allows you to search individuals as well as firms to check registration status and to see if there have been complaints or disciplinary actions taken (www.securities-administrators).

Adviser credibility is not just a financial issue. Think of all the other advisers you likely are already relying on without fully understanding their qualifications or abilities. How well do you know your insurance agent and their qualifications? How did you evaluate the person(s) providing you with legal and tax advice?

Over a lifetime on a farm, most farmers will accumulate significant wealth. If the adviser you have selected to assist you in retirement, succession, legacy, and wealth transfer planning does not have a fiduciary responsibility to you, the risk is huge and potentially costly to your estate.

Is the primary goal of your grain marketing adviser to assist you in increasing your returns or is their primary function to purchase grain for a company they may be employed by? Is your crop adviser's goal to maximize your profit or to maximize your production?

Since 1991, self-regulated Certified Crop

Advisors (CCA) have provided farmers with an assurance of expertise and skills in agronomy. Farmers can even read online the CCA code of ethics which sets out the rules that CCAs must operate under ([//prairiecca.ca/cc-members/code-of-ethics.php](http://prairiecca.ca/cc-members/code-of-ethics.php)).

However, the code is not as clear as farmers might like on whether a CCA has a fiduciary responsibility to the farmer client. Article III of the code states: "A CCA

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I need advice, how do I find the right person to help?

Selecting an adviser is one of the most important business decisions you will make. It will take time and work to find an investor who has the qualifications and experience to provide the guidance you are seeking. Here are some steps to consider in looking for the right adviser:

- Know in your own mind exactly what you want an adviser for and what you need that adviser to do.
- Seek referrals from your network of trusted colleagues and friends, and from professional associates you already have, such as your accountant or lawyer.
- Narrow the list of potential advisers by phone. A phone call will allow you to determine if they are taking new clients, what type of services they provide, and what type of clients they prefer to work for.
- Following the phone screening, meet those still on your list at their office. This will give you the opportunity to see how they run their own business, which is likely a good indication of the quality of advice they will provide to you.
- Ask lots of questions. Questions that the Canadian Securities Administrators website suggests include:
 - What is your education and professional experience?
 - How long has your firm been in business?
 - How long have you been with the firm?
 - Are you and your firm registered with a securities regulator?
 - What products and services do you offer?
 - How will you help me reach my goals?
 - What kind of account reporting will you provide?
 - How are you paid for your services (salary, commission or flat fee)?
 - What fees will I be charged and how will they be reported to me?
 - Who are your clients?
 - Can you give me references from clients who are like me?

Additional questions you might also want to ask:

- Can you provide any type of sample of your services you have provided to other clients?
- How closely will you work with me? How often do you contact your clients?
- Will I work only with you or will I be working with a team or some other person?
- Will anyone else benefit from advice you give me? How do you handle conflict of interest?
- Have you ever been subject to disciplinary action by a regulatory board during your career?

As you ask these questions, do you feel they are listening and responding with clear answers? Do they have questions of you and your business? Do they ask about your goals and needs? Do you have good rapport with them in your meeting? Most importantly, do you feel comfortable with them?

Finally, before hiring an adviser, check out their registration, qualifications and if they have any record of disciplinary action with the regulatory body they are affiliated with.

shall protect, to the fullest extent possible, the interest of the employer or client insofar as such interest is consistent with the law and professional obligations and ethics.” It does not prioritize client or employer. Therefore, to whom does a CCA owe a greater allegiance?

Unfortunately the maze of regulatory bodies, coupled with a confusing array of

titles and specialties, places a huge onus on the public to carefully screen advisers before hiring them. You have to know exactly what you want an adviser to do, and then determine if those you are considering as advisers actually have the training, qualifications, and most importantly, the fiduciary responsibility to you. Are they actually going to be working in your best

interest? Or is their primary responsibility to the firm they represent? Does their paycheck depend on the success they have in improving your business or are they more motivated by commissions from sales of products to you?

Your financial, business, and personal success hinges on how well a job you have done of choosing the right advisers. **CG**

The CSA categorizes financial advisers based on training and what an advisor is qualified to do. The following CSA registrations are posted on the CSA website:

FIRM REGISTRATION TYPE:	WHAT THEY DO:
Investment dealer	<p>A firm that sells a broad selection of investment products, such as:</p> <ul style="list-style-type: none"> • shares and bonds • mutual funds and exchange-traded funds • limited partnerships • real estate investment trusts and other investment funds • exempt products (such as shares in a private company) <p>Some investment dealer firms offer advice and a full range of services such as market analysis, securities research and portfolio management. Others act more like brokers, selling or buying investment products based on your instructions. Investment dealers must be a member and follow the rules of the Investment Industry Regulatory Organization of Canada (IIROC). IIROC approves what products and customer types the investment dealer and its representatives can deal in.</p>
Mutual fund dealer	<p>A firm that only sells mutual funds.</p> <p>Except in Quebec, mutual fund dealers must be a member and follow the rules of the Mutual Fund Dealers Association of Canada (MFDA).</p>
Scholarship plan dealer	<p>A firm that pools your contributions in a Registered Education Savings Plan (RESP) to invest in scholarship plan units.</p>
Exempt market dealer	<p>A firm that sells exempt products. Exempt products can be sold without a prospectus. A prospectus is a legal document that gives investors important information about the investment (such as risk, fees, suitability, etc.). Without this disclosure, exempt products offer less protection to investors.</p>
Restricted dealer	<p>A special kind of dealing registration used for firms that do not quite fit under any other category. Securities regulators will tailor each restricted dealer registration with specific requirements or conditions.</p>
Portfolio manager	<p>A firm that provides advice, manages your investment portfolio, and buys and sells on your behalf according to the instructions or discretionary authority you have given.</p>
Restricted portfolio manager	<p>A firm that provides advice about a particular sector or industry (such as real estate, oil and gas, biotech, etc.). Securities regulators will assign restrictions tailored to the firm's expertise.</p>
Investment fund manager	<p>A firm that manages an investment fund.</p>
Dealing representative	<p>A person who buys or sells investment products on your behalf based on your instructions. What they can sell or buy depends on the registration category of the firm that employs them.</p>
Advising representative	<p>A person who provides advice on investment products. They can manage your investment portfolio according to your instructions. They can also make decisions and trades on your behalf. Advising representatives are employed by portfolio managers.</p>
Associate advising representative	<p>A person who provides advice under the supervision of an advising representative.</p>
Ultimate designated person	<p>The chief executive officer of a registered firm. They are responsible for their firm's overall compliance with securities law.</p>
Chief compliance officer	<p>A person who manages a registered firm's day-to-day compliance.</p>



Timing Matters for Winter Spreading

Peer-to-peer project aimed at reducing phosphorus run-off

By Richard Blyleven,
Executive Board Director

Farmers have always been stewards of the land. That means we need to take responsibility for even the unforeseen consequences of our farming practices.

Over the last few years, for example, Lake Erie has had a tremendous problem with algal blooms. The problem is caused by phosphorus entering the lake. Agriculture is part of that problem, thanks to phosphorus leeching from fertilizers and animal manures. It is fair to say that over the last fifty or sixty years, farmers have done a good job of sending less phosphorus into the lake. Still, we need to do more to curb phosphorus run-off.

That's why the Ontario Ministry of Agriculture, Food and Rural Affairs and several Ontario commodity and farming organizations, including the Christian Farmers Federation of Ontario, have been working together on the Timing Matters Peer-to-Peer pilot program. The goal is to encourage farmers to avoid spreading manure during the winter—and to prove to government that we can regulate ourselves.

The pilot project has been running in the Lake Erie basin, from Windsor to Guelph, and works to identify, visit, and educate farmers who are



seen spreading manure when the ground is frozen or has snow cover on it. In both cases, the soil is slow to absorb nutrients, so a high level of nutrient leeching will result.

Over the winter months, OMAFRA field staff travelling in the Lake Erie basin can identify farms performing winter spreading and do a risk assessment of the situation. The assessment is very basic, but if warranted, commodity groups get involved. Each commodity organization involved has designated a peer farmer to give the producer advice on alternatives to winter spreading.

We are hoping that farmers who do apply manure at the wrong time of year will listen to the advice of peers who understand the region and work within the same commodity.

Farms larger than 300 units are regulated under the Nutrient Management Act, so the Timing Matters Peer-to-Peer initiative is aimed at farms with 300 animal units or less. Unlike legislation,

there aren't one size-fits-all rules in an approach like this. Farm-size and geography will make a difference as to how big a problem winter spreading is. A one-off incident will be treated differently than regularly scheduled spreading.

We at the CFFO are hopeful that this pilot project in the Lake Erie basin will be successful in reducing phosphorus run-off in the Lake. If successful, we hope that the Timing Matters peer-to-peer pilot project can be applied to the entire province to reduce phosphorus in all our freshwater basins.

The Christian Farmers Federation of Ontario is one of three accredited farm organizations in Ontario. The organization is focused on long-term issues facing the sector and is supported by 4000 farmers in the province. Learn more about us at www.christianfarmers.org

VALUE ADD

STEP TWO: PREPARATION

What you should know before you open your farm gate to the public

BY HELEN LAMMERS-HELPS

Direct marketing and value adding can be the logical next step on the path to farm expansion. Whether it's growing strawberries to sell through your own retail outlet, or hosting dinners in the old bank barn, or any of the 1,000 other possibilities, such opportunities can help the farm capitalize on its investments and expand its markets.

But it takes careful preparation. All too easily, farmers can find there are way more twists, turns, ruts, and sometimes even dead ends than they thought on the path to selling value-added products and services.

For this column, we talked to experts and farmers with experience in value adding to uncover these pitfalls.

If you're thinking about selling to the public on your farm, there are a lot of things you need to consider, cautions Jessica Kelly, direct farm marketing program lead with the Ontario ag ministry. While it seems exciting to open a farm market or host an event on your farm, the reality is that you could be dealing with regulations, extra insurance, zoning changes, and an increase in property taxes, she says.

Getting all the required approvals and paperwork in place will probably take longer than you think — and cost much more than you think as well, says Amy Strom, co-

owner of Strom's Farm and Bakery, an agri-tourism operation near Guelph, Ont.

While it varies between municipalities, Strom says in her experience approvals that seemed like they should be issued within a couple of months ended up taking three years.

"It wasn't difficult but it took a long time," Strom says. She advises familiarizing yourself with all of the regulations that will have an impact on your venture ahead of time.

And make sure you contact your insurance agent. When you open up your farm to the public, you should be informing your insurance company due to the extra risks involved with wagon rides, infectious diseases from exposure to animals, and other risks to the public on your farm, says Kelly.

Strom agrees. You need to be completely transparent with your insurance company about what you're doing, she says. "You want to make sure you're covered... you don't want any surprises."

Strom says it pays to get three quotes. The cost of insurance is significant and can vary substantially between companies.

Also be prepared to take the time you need to get on top of your costs.

What are the opportunities?

Today's consumers, especially Millennials, are interested in a product's back story, says Jo-Ann McArthur, president of Nourish Marketing, a Toronto-based food and beverage marketing business. They want to know not only how the food was grown and processed, but also how the workers and animals were treated.

Be aware, too, that nine out of 10 Canadians have never been on a farm, so opening your doors to the public can fill a niche.

Rebecca Mackenzie, president of the Ontario Culinary Tourism Alliance, a not-for-profit organization that has helped develop many successful food tourism ventures, is also excited about the prospects for farmers. She

says the three Ts —Taste, Tour, and Takeaway — can help leverage more sales and diversify income.

When consumers taste samples before they buy, there is an opportunity for them to become more educated about the product, which adds value, explains Mackenzie. Plus, people are more likely to buy if they've tasted the product, she adds.

Tours also add value because people want to learn the story behind a product, adds Mackenzie. But tours do not have to be guided tours, she says. Signage in the blueberry patch explaining the history of the farm and the family can provide that educational piece, she says.

Continuing with her example of the blueberry farm, Mackenzie says having pies for sale creates a takeaway element. People become ambassadors for your farm when there is a takeaway, she says.

Too often, producers start value-add or retail projects without understanding the prices they'll need from the market in order to generate an adequate return on their investment and labour, says Kelly. As a simple example, she asks, "If you start by making jam from berries that would otherwise go to waste, if the market grows can you still make money if you are no longer using 'waste' berries?"

Strom says some farmers are tempted to offer wagon rides for free or to give away pumpkins, but she cautions against doing anything for free. "Wagon rides have a cost. The cost of maintaining the tractor, the fuel, your time."

There's also a price to changing your mind mid-stream. Strom says there can be a backlash when people are asked to start paying for something that was previously free.

Perhaps the biggest question, though, is one that you have to answer by looking in the mirror.

Do you have the right personality for the project, especially if it involves selling to the public? Is it the kind of challenge that would add a spark to your life, or would you be dragging yourself out of bed?

"It takes a special type," Strom says.

Do you like meeting people? Do you like answering questions about your operation and your product? Do you know how to handle customer complaints?

Meghan Snyder, co-owner of Snyders Family Farm, an agri-tourism operation near Plattsville, Ont., agrees with Kelly. When she says "You really have to like people to run an operation like this," she pauses and adds with a laugh based on experience, "I mean really, really like people."

Strom goes even further. Not only do you have to like people, you have to like them in your personal space.

If you open up your farm to the public, she says, "you can put up fences but you'll still end up with people in your backyard."

Strom recommends keeping the public space separated from your living space so you can maintain some privacy. Also be prepared, because it may take a lot more room than you realize.

When the Stroms developed their on-farm bakery, they thought they were being smart by having their loyal customers come to a retail shop that they set up in their garage attached to their house — nice and convenient when the Stroms had to work there, but still not in the house itself.

Then, when they actually opened the business, they learned that success means getting as many as 5,000 people on the farm on a single day.

Everyone wants to be successful, but not everyone wants 5,000 people standing in a line beside the kitchen window.

Work-life balance is also a challenge when they are open, says Strom. "It's long days, seven days a week, which makes it difficult to find time to rejuvenate," she says. "With the bakery attached to the house, there's a tendency to work more."

Social media adds to the challenge of work-life balance, says Kelly. "It's hard to turn it off. You could get people sending you messages late at night expecting an immediate response," she says.



“You really have to like people to run an operation like this,” says farm value-adder Meghan Snyder. “I mean, really, really like people.”

That's been Snyder's experience. She says today most queries come in via email or social media and people expect a response within the hour even if it's 10 o'clock at night. "It can be hard to bring your best self when you're tired."

Not only will you be dealing with customers day in and day out, you'll also likely need staff. If you don't enjoy hiring, training and managing, you'll need to hire a manager, says Strom.

Staff training is key, agrees Kelly. Do you even know how to give your staff safety and first-aid training? Do they know how to respond if someone gets hurt?

You have to wear a lot of hats, adds Snyder. "Farmer, builder, creator, HR... you have to have a lot of skills when you are letting people onto your farm," she says.

Strom found that too. She chose her job title — director of first impressions — because it encompasses the many hats she must wear and helps keep her focused.

The job title also keeps her focused on the job she always has to be up for, she says. "First impressions are really important to keep people coming back." **CG**

Resources

ontariofarmfresh.com

Ontario Farm Fresh Marketing Association, a not-for-profit organization for farmers interested in direct sales. Workshops and annual bus tour.

[//www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex3482#checklist](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex3482#checklist)

Alberta Agriculture Direct Farm Marketing Checklist

www.growfoodtourism.com

Tourism Association is an industry-led, not-for-profit organization that promotes food tourism.

[//takeanewapproach.ca/programs/](http://takeanewapproach.ca/programs/)

The Agri-food Management Institute offers Transition Smart workshops across Ontario for producers considering making the leap to processing.

www.farmersinspired.com

North American Farmers' Direct Marketing Association (NAFDMA) is a trade association for farmers who are passionate about agritourism and farm direct marketing.



Putting down roots in Canadian soil

With farmers like Peter Nikkel helping Raymond Ngarboui, below, refugees from the world's trouble spots are getting a new chance

BY STEPHANIE MCDONALD

Before we even exchange our first word, I get a sense of Raymond Ngarboui. When we meet, he's on the phone with a refugee settlement counsellor who asks if he might have garden plots available for two families from Burundi, recently arrived in Winnipeg and feeling stressed and isolated. This is 43-year-old Ngarboui's side-project but full-time passion. The plots being talked about are in the Rainbow Community Garden, his brainchild and a haven in the city's south end since 2008 for recently arrived refugees and immigrants to Canada.

Rainbow Community Garden is more than just a place to grow food and flowers as a hobby; it's a place where newcomers to the country can grow food they are familiar with while saving on their grocery bills. Along with crops you can find typically find in Manitoba, producers here are growing leaves and vegetables from tropical parts of the world that are difficult to find in the city.

Ngarboui gives me a tour of the site, which is situated on the grounds of the University of Manitoba, not far from the stadium where the Winnipeg Blue Bombers play. It is divided into asymmetrical plots. The bigger

the family, the larger the plot they receive. Along one side there is a row of raised beds, reserved for kids aged five to 10, and higher beds for those 75 and up. As we walk amid the rows, Raymond picks up a shovel that someone has left lying on the ground and later uses it to attack an unwanted weed.

Ngarbouï speaks from experience when he says it's hard to adjust to food in Canada. Even when vegetables native to the newcomers' home countries can be found, they are usually of poor quality and expensive. Ngarbouï collects requests for seeds from the growers and places orders with companies in Canada and abroad. He's also made connections with local garden centres that donate seeds and seedlings once the early summer rush has passed. After the first growing season, seeds are saved for future planting.

According to the Government of Manitoba, of the 16,175 newcomers to the province in 2014, 9.2 per cent, or 1,495, were refugees. Manitoba received the highest number of refugees per capita in Canada in that year. When they first arrive, many refugee families live in apartment buildings in downtown Winnipeg. They may not be familiar with public parks, or know where to take their kids, so they stay inside. This affects both physical and mental health.

Ngarbouï tells the story of the oldest gardener, an 89-year-old man, originally from India. He was diabetic and had high blood pressure. Two months after joining the garden, Ngarbouï recounts that the man's family doctor said, "Oh! Your health has improved a lot. Did you go to the gym? What have you been doing lately?" And he said, "No, I did not go to the gym, but I've been gardening." The doctor encouraged him to continue as his health had dramatically improved. "That's how he became even more interested in gardening."

TURNING THE SOIL

The story of the Rainbow Community Garden cannot be separated from Ngarbouï's own. Ngarbouï was born in the early years of Chad's decades-long civil war. Chad is situated in central Africa, and is the continent's fifth-largest country. Despite having to regularly flee his home throughout his childhood, Ngarbouï completed Grade 12 and studied agriculture at the university level. In his mid-20s, he fled Chad for neighbouring Cameroon, one of tens of thousands of Chadians seeking refuge in that country.

In Cameroon he received a bursary through the United Nations to return to school and he graduated with a degree in business and co-operative management. Another bursary followed, and this time he studied human resources. At the same time, he was working with his fellow refugees to start gardens and raise chickens to help families get income to pay for their children's school fees. His work didn't go unnoticed.

On a visit to the country, a delegation from the United Nations Development Program was told about the project Ngarbouï had initiated, and they made a visit. The head of the delegation asked Ngarbouï if he was interested in resettlement in Canada.

The Canadian immigration agent who interviewed him told him that he'd be a good fit for three locations — Laval, Winnipeg and Edmonton. He was advised that as a French speaker the integration process would be the easiest in Laval. After hearing about the three places Ngarbouï declared

that he wanted to go to Winnipeg. He was told that it was very cold there and while he wasn't being advised not to go, he was warned that the adjustment period would be difficult.

"I asked if there were people living there. She said, 'Yes, there are people living there.' I said, 'If there are people living there, it means I can live there too, so I will go there.'" Since high school, Ngarbouï had been interested in learning English, but hadn't had the opportunity.

After touching down in Winnipeg in September 2005 he enrolled in English as a Second Language classes and started to look for work opportunities.

"At that time I gathered information about farming here, the possibilities and opportunities. I realized that farming here was more of a family enterprise... So I said, 'Okay, it's better to do something else.'"

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The first step is gardening on a small scale, learning how to grow the crops they loved before war and exploitation forced them into refugee camps and a foreign world



He was on a break during a night shift as a cleaner at the University of Winnipeg when a sign on a bulletin board caught his eye. Lower-income individuals were invited to apply for a program on community development offered by the Community Education Development Association (CEDA) at Red River College. As soon as his shift ended he raced to CEDA to express his interest. Since then, Ngarbouli has gone from being a student, to board member, to being hired as an employee of CEDA in 2009, where he still works today.

For his school assignments, Ngarbouli would talk to Indigenous and newcomer families to find out what their needs were and what facilities and infrastructure were lacking in their neighbourhoods. He was also volunteering at a market in downtown Winnipeg where people were asking for fresh food. “That’s how the idea of the garden came out, to supply the market with produce. And also to find a place where newcomer families and refugees could take their kids in the summertime, and to grow their own food and save on their groceries.”

SOWING THE SEEDS

Together with members of his church, Ngarbouli approached the City of Winnipeg to see if they might have land available that fit the criteria for his envisioned garden. It had to be accessible by bus, and in a place where families could spend time without being disturbed. The city didn’t have any land that fit the bill, but referred Ngarbouli to the University of Manitoba, located in southern Winnipeg.

The university provided land that was previously used as a garden by their plant science department. It ticked a lot of boxes that Ngarbouli was looking for: it was remote, quiet, and removed from the bustle of downtown. Kids could run around freely.

The garden was named Rainbow Community Garden, borrowed from the metaphor of the “rainbow nation,” used to describe post-apartheid South Africa. In 2008, its first season, 16 families had garden plots. In 2017, there are over 300 families gardening on six sites, representing 29 nationalities. About 60 per cent of the gardeners are ethnic Nepali refugees from Bhutan who were expelled from the country in the early 1990s. Another 30 per cent are from African countries, and the remainder are South American, Middle Eastern or Canadian-born.



Priority is given to single mothers, then families with at least four members and a senior, then families of six or more. Immigrants with a background in social work are also given priority, and are available to talk to families who may need advice about problems they’re encountering. Most of the gardeners arrived in Canada by way of refugee camps. “When they meet here, they open up, sharing their memories from refugee camps and from their home, the atrocities that they went through. Many times you can see them talking and starting to cry. You can see the tears coming. And after a while they start laughing,” Ngarbouli says.

Demand quickly outpaced the supply of garden plots available at the university site, and it was difficult to find more land. Ngarbouli started to approach churches and schools about using their backyards. He also put out the call to individuals, asking if their empty backyards could be used.

“The first person who responded to my call was the former lieutenant governor, the late John Harvard. He said ‘Okay, I heard what you’ve been doing and I’m very excited to have you use my backyard.’ It’s a huge backyard. I went there and found that five families can use his backyard. We used it for three years before he sold the house.”

Ngarbouli has also worked with building owners and managers to get raised beds built near to apartment buildings where newcomer families live.

HELP FROM A FARMER

The families are gardening on six sites in Winnipeg and dotted throughout southern Manitoba. And this is still not enough. “We’ve been working on finding more land, because we have a waiting list this year of 49 families,” Ngarbouli says.

One of the six sites is on the home farm of Peter Nikkel, who farms 1,200 acres with his brother, close to Landmark, an hour’s drive southeast from downtown Winnipeg. The two first met when Ngarbouli was trying to get the downtown market off the ground. Nikkel had had good yields that year and wanted to check out the potential of selling surplus vegetables at the market. One thing led to another. He was invited to the spring and fall celebrations at the garden and then Ngarbouli asked if he might have land available for gardeners to use.

For the past four years, Nikkel has provided two to three acres of what used to be a cow pasture, surrounded by a windbreak. It’s divided into plots for four different groups to use. He says that some years are better than others. “One year you’ll have really good production. You have your reliable crops, like potatoes, carrots, onions, peas, beets. Those are almost one hundred percent. Then the next year you’ll have a cooler weather year, like two years ago, when the warm-weather crops like beans, toma-

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SPOTLIGHT ON CROP ADVANCES

Crop Advances is an annual report that summarizes applied research projects involving the OMAFRA Field Crop team, in partnership with commodity groups, industry and the OSCIA. Go to the Research & Resources page at www.ontariosoilcrop.org



Project shows importance of consistent, annual corn nitrogen monitoring

By Lilian Schaer

A three-year study currently under data review by the Ottawa-Carleton Soil and Crop Improvement Association (O-CSCIA) underlines the importance of closely monitoring corn nitrogen levels every year.

New technology like the Y Drop™ from 360YieldCentre™ lets growers apply late-season nitrogen even up to tassel. The initial intent of the project was to test the viability of late nitrogen applications using this new system; 2017 marked the final year of data collection in the three year project.

“This project has shown that growers should never ignore the impact of what nitrogen can do to improve profit potential,” says project lead and O-CSCIA director Sean Cochrane.

How was the research being conducted?

Eleven farm sites took part in the final year, each planting six trial strips on a field scale with three replications of varying rates and application timing. According to Cochrane, some fields used in the 2015 were re-used in 2017 where possible in order to make use of VERIS® soil sensor data collected earlier in the project. Other parameters included digital planter layer, nitrogen as applied maps, pre-side dress nitrogen sampling, soil samples to verify and calibrate the VERIS® layer, and the most critical analysis layer – yield.

Unfortunately, the weather greatly affected how the trial unfolded in its last year: the



Ottawa area set new precipitation records, with 1168.4 mm of rain falling in 2017, the highest recorded level since record-keeping began in the region in 1873¹. As a result, some of the sites in 2017 will not be available for complete analysis.

“With the weather, we couldn’t rely heavily on pre-side dress nitrogen sampling results as we could in other years due to the saturated soil,” Cochrane says. “There was much trepidation about if we’d actually get a crop to full maturity with the lack of heat units, but we had a September from heaven that allowed the crop to mature and us to achieve results for this project.”

What has the project found?

Overall, due primarily to the impact of the wet weather, the Maximum Economic Rate of Nitrogen (MERN), which is the highest rate of nitrogen that a grower can apply while still making money, increased significantly in 2017. While MERN values ranged from

90 to 130 pounds per acre in 2015 and 2016, average data from 2017 is in the range of 150-160 pounds of nitrogen per acre.

“This has truly pointed out how important it is to monitor nitrogen effectively each and every year,” Cochrane says. “Rates can vary tremendously from one year to the next so it’s important to be flexible and adjust to field and weather conditions.”

Detailed data analysis from the final project year is now under way and full results will be posted on the Ontario Soil and Crop Improvement Association (OSCIA) website at www.ontariosoilcrop.org as it becomes available.

Who is funding this project?

Funding was provided through a Tier Two grant supported by OSCIA and the Ontario Ministry of Agriculture, Food and Rural Affairs with OMAFRA staff support provided by Scott Banks, Nicole Rabe and Ben Rosser. Most notable are in-kind contributions by Paul and Jean Sullivan of PT Sullivan Agro, Paul Hermans of Dupont Pioneer, Karon Cowan of AgTech GIS, Sean Cochrane of Agri-Partners Crop Centre, Jordan Wallace of GPS Ontario, and by participating farmers. OSCIA assisted with sharing of research results.

Top takeaways

- Never ignore the impact of what nitrogen can do to improve profit potential.
- Stay focused on nitrogen use in early stages of corn development and influence what can be done in later stages
- Remain flexible and adjust to conditions as rates can vary tremendously from year to year.



¹Source: https://twitter.com/YOW_Weather/status/950096022998519808

toes, peppers, often don't do well." The Red River clay and the climate aren't always amenable to growing preferred plants like okra. "So sometimes it works and sometimes not. Sometimes it's disappointing to drive out of the city, put all the trouble and work into it and in the end get very little or nothing."

As to why he provides a few acres for the gardeners, Nikkel says, "It's a bit of charity, it's a bit of a hobby, it's self-sufficiency." He

says that most farm people have a long history with gardening. "We like to have that independence of growing our own food. It's the same as with these people." And Nikkel's own mother arrived in Canada as a refugee from Ukraine in the 1940s.

Nikkel says that charity work is part of the fabric of life in the area he lives in. A lot of his neighbours visit projects in Haiti, Bangladesh, or in different countries in Africa,

but for him, that work happens just beyond his front door. In the process, he says he's "learned a lot of stuff, a lot of things about how life works. About different cultures and how difficult it all is. It's very tough."

For many of the gardeners, Nikkel is their link to rural Manitoba. On different days throughout the summer he'll cook some of his chickens over a fire and the gardeners will prepare dishes. Nikkel says this sharing

Other farmers, other projects

Harry and Kathe Harder Clavet, Sask.

Harry and Kathe Harder have a 300-ewe flock in Clavet, Sask., 25 kilometres southeast of Saskatoon. Harry estimates that more than 50 per cent of their farm-gate customers came to Canada as either refugees or immigrants. The Harders have a map of the world on their kitchen wall, where they put a star on each country they've had a customer from. There are 75 stars on the map.

It's a family-run operation, but when they need an extra pair of hands on the farm, such as to build a corral, they will hire recently arrived Syrian refugees. Many are skilled construction workers. Communication isn't an issue, as Harry speaks Arabic, which he learned as a service worker with Mennonite Central Committee in the Middle East over 30 years ago.

"Many would like to farm," Harry says of the newcomers he interacts with. "They have a different paradigm and could do something quite positive for farming in Canada."

Quinte Immigration Services Quinte Region, Ont.

Since May 2016 the Quinte Immigration Services of Quinte Region, northeast of Toronto, has been running the program Farmers Feed the World. There were two factors at play in starting the program: Quinte Immigration learned that 25 per cent of the Syrian refugees coming to Ontario had some farming experience, and several counties in the region faced a labour shortage in the agricultural sector.

The original intent of the program was to provide information in Arabic to Syrian refugees on agriculture in Ontario. It was quickly observed that finding a job was the top priority for the 150 participants, anxious to be self-sufficient as one year of government financial assistance drew to a close.

Arabic-speaking staff conducted one-on-one interviews with the project participants to gather information on their skills and agricultural experience in Syria. They were then matched with farmers and employers in the agrifood sector who had job opportunities available.

Another component of the project was an event in Belleville, where potential employers from the Quinte Region and Syrian refugees looking for work could meet.

"As a result of this project, 60 per cent of participants obtained some form of employment or self-employment in the agrifood sector," says Orlando Ferro, executive director of Quinte Immigration Services.

Rod Olson, Calgary, Alta.

Rod Olson is an urban farmer in Calgary, Alta., growing vegetables in 35 backyards across the city. He sells his produce to restaurants, farmers markets, and a harvest box program.

In the past he's hired newcomers from Ethiopia and Eritrea to work with him, and last summer he and his business partner employed three Syrian refugees, one of whom had farming experience.

In late 2016 the Alberta government put out a Request for Proposals for 20 acres of provincial land on Calgary's transportation utility corridor. Olson is a member of a group that submitted a proposal focused on making the land available for newcomers to Canada to grow and sell food. Their proposal was selected, and while there are still a few steps to go before it's a fait accompli, if all goes according to plan, they will be on the land this spring.

Three initiatives are planned. The first is a community garden with 20 to 30 plots for newcomers, where they can grow food for their families. The second is an apprenticeship program which will be run by Olson and another urban farmer for two to four people, to teach both about farming in the city and on the sales side of the business. The final piece is to have five parcels of land available for entrepreneurs, where they could start out on their own with an agrifood business. There would be the potential to grow foods that newcomers to Canada are missing.

"I know the value of having my own hand in the soil," Olson says. "Because these people have been displaced, I think that there is nothing more profound than planting a seed, seeing it grow, and then consuming what the earth has given you. There's a sense of home and stability that comes when you can do that, and that's been ripped away from any newcomer. And so if we've got this land, then why can't we let them have that experience."

of food outside can remind people of home, an experience they're no longer able to have living in a downtown apartment. And for him, the expense of travel for new experiences is a non-issue. "I don't need to go to the country to get the taste, it comes to me."

Interacting with the newcomers and hearing their stories gives him something to think about as he drives his tractor around and around a field. It's also made his dinnertime conversations more interesting. "You go to dinner and you have stories. I could talk about soybeans, whether I've harvested 38 bushels or 50 bushels, but who cares. The cropping, prices, and futures, I know all that stuff, but it gets boring pretty quickly. People just don't want to hear about it. But with culture, religion, relationships, whatever people do, it's huge, it's what people like to talk about."

But most of all, he continues to provide space for gardeners because Ngarbouai asks him each year if he will. He admires Ngarbouai's skill in building up the project and getting the university, corporations and newcomers all on board, something most people wouldn't be able to accomplish.

"I would've given up on it long ago. But Ngarbouai doesn't. He just keeps working at it. So it's hard to say 'No, I'm not going to help, I don't care. I only care about making my own money, the rest of the world can go and do whatever it wants.' Once you know somebody, you get along with someone, and you have the resources to help, why wouldn't you help?"

Over the years, Ngarbouai has been nominated for and won a number of awards for his work with the Rainbow Community Garden. This past April he won one of the 2017 Premier's Volunteer Service Awards. He was told that the award was recognition of the fact that the garden — which has never received any government support — was a good example for both immigrants and Canadian-born of how newcomers can contribute to society.

It takes up a lot of time to find land, procure seeds, organize events, and build relationships with the gardeners, local businesses and supporters. But when I ask Ngarbouai why he does the work with the garden on top of his day job, he doesn't hesitate with his answer. "I've benefited a lot. If I'm who I am today it is thanks to the help that I received from people in my communities. I was seven or eight, walking distances to escape civil war, and I was being carried by adults for a distance. One picked me up, and then another one, to reach wherever we were going. And



“It’s the same as with these people,” says farmer Peter Nikkel, whose mother arrived as a Ukrainian refugee in the 1940s. “We like to have the independence of growing our own food.”

the food was always shared. I grew up in a situation where I couldn't survive without help from the others around me.”

SHARING THE HARVEST

A great deal of sharing happens within and across the garden plots. Many of the gardeners were farmers in their home countries, so grandparents and parents share their knowledge with younger family members. And then there's the sharing of seeds and practices.

The gardeners from African countries have become hooked on eating the leaves of the sweet pepper plants, as the Filipinos do. "They found it so delicious and started eating it as well. Now, many of them, instead of the fruit, they rely more on the leaves. Sometimes you will see the peppers without leaves," Ngarbouai says.

He also tells the story of a woman from Liberia who was growing a lot of sweet potatoes in a plot close to his. He assumed she was growing them for the roots, as his family had done back home in Chad. "Usually we remove the leaves and throw them away and just eat the roots," Ngarbouai says. "So I asked, 'How long will it be taking for you to get the sweet potatoes?' And she said, 'No, no, no, I am growing them for the leaves.' I found it a little bit strange, but I did not say anything."

Then, at one of the monthly potlucks Ngarbouai tried a dish he found very tasty. Turns out it was made from sweet potato leaves. That night, he called his mother in Chad and told her, "You know what? The sweet potato leaves that we've been throwing away are a nutritious food and we should not throw them away again." His mother cooked it for her friends, and now all of them are eating the leaves.

PUTTING DOWN ROOTS

There was a 100 per cent chance of rain one evening when I visited the garden, so only a few families came by to tend to their plots. Ngarbouai said that it's usually full until sunset. There was a couple with their young son who had come to do some weeding. Ngarbouai greeted them in Nepali. They were originally from Bhutan, but the man left as a young boy. His family lived in a refugee camp in Nepal for 20 years before being resettled in Winnipeg in 2011. He has four brothers and calls Ngarbouai his fifth. They shared the news with Ngarbouai that they had bought a house and would move in the next week.

It's a moment I often replay in my mind. Ngarbouai shakes their hands. As I watch, he congratulates them. **CG**



A SENSE OF PLACE

BY HELEN LAMMERS-HELPS

We've all been struck sometime, visiting a place where the buildings and landscaping just seem to feel right, where there is a sense of harmony and flow.

Creating that sense of place doesn't just happen, says Stratford, Ont. architect Krista Hulshof, who specializes in designs for rural properties.

Every place has a story to tell, but it takes time to discover it. "You have to turn off your phone and sit and listen," she says, adding that it's best if you can observe the property in all four seasons."

Ask yourself, what is it that makes the property special? Then make sure you capture that. Is it the view? Is it the old bank barn?

And then take that message home, she says, "Don't spoil what makes the place special."

Every landscape is a unique, unfolding story, agrees King City, Ont. landscape designer Jean-Marc Daigle, owner of Genus Loci Ecological Landscapes Inc. To capture the spirit of a place is to open your eyes and mind to this multifaceted story and to derive meaning from its natural and cultural elements.

Daigle sounds poetic as he describes the factors that contribute to each property's unique history. "Over time the forces of nature and culture conspire to create ever more complex tapestries of artifacts and stories, old and new. As landscapes mature, they accumulate natural and cultural layers that are chapters in the story of that place," he says.

"It's about the natural processes that gave it form and continue to shape it, and of the people who settled and inhabited it," says Daigle. A landscape's natural history is defined by the environmental and geological processes that formed its terrain, soils and hydrology, and by the plants, animals and ecological communities that are, or once were, indigenous to the geophysical landscape.

The cultural history is imprinted by the people who historically or currently live there, who have stewarded, cultivated, developed and reshaped the land.

Daigle offers practical advice for translating the story of a landscape into design considerations.

First off, decide which natural and cultural chapters of the property's unique story are most significant and important to you.

Daigle then says you should become familiar with the tree, shrub and wildflower species that are indigenous to your area and growing on your property.

Survey the property and map out the property's natural features such as forests, streams, or prairie meadows that occur naturally and which have historically preceded the clearing and cultivation of the land, or which are re-occupying the land that is no longer cultivated.

Learn about the native wildlife that inhabit and depend on the natural ecosystem, and also review the site's hydrology, drainage patterns and catchment areas.

Research the cultural history of the property and the local area including its aboriginal history, the history of settlers who cleared and occupied the land, the ruins of buildings and structures on the property such as barn foundations, stone walls, orchards gone wild, stone piles, farm ponds, and abandoned farm equipment. Wagon wheels, mill stones and old machinery can create tangible connections to the past.

Are there unique geological features such as drumlins, eskers, cliffs, moraines or rock outcrops that can offer design insights and inspirations? Consider incorporating creeks, ponds, wetlands or other water elements into the design.

Are there other cultural aspects that are unique to your area such as local building practices, design styles or construction materials?

THE LARGER PICTURE

Before beginning the design process, develop design themes, goals and objectives that highlight the unique qualities and characteristics of your property. With this knowledge, sensibility and creativity, new designs can be imbued with themes, styles, elements or symbols to reveal this story.

"When the design effectively captures the spirit of a place, it is bound to look and feel harmonious," says Daigle.

Native plants and native stone will help you connect to the spirit of a place. In particular, Daigle cautions that the market has been flooded in recent years with cheap imports of sandstone, granite and limestone from China. Unfortunately, imported stone makes no connection whatsoever with the spirit of a place, he says.

Your architectural style should also support your business plan, advises Hulshof. If it is important that you portray a prosperous image, then your buildings should reflect that. If you want to show that it is important to you that you live in and enjoy the landscape, use your buildings to highlight and amplify that landscape.

Appealing to the emotional side is what makes your place memorable, she says.

Most of all, be authentic. A little creativity can go a long way towards giving a functional site an aesthetic appeal but she warns against simply slapping on some shutters and repurposed timbers. "You need to be authentic," she says. "Create a whole experience from the laneway." **CG**

Bonnieheath Estate

Anita and Steve Buehner, owners of Bonnieheath Estate Lavender & Winery near Simcoe, Ont., have worked hard to create a sense of place since transitioning from tobacco to an agritourism destination about a decade ago.

Working with a local graphic artist and artist, the Buehners took their inspiration from the farm's history. At the turn of the 20th century, the farm was owned by Colonel William Heath. Farm records found in the attic of the century home built by Heath indicate that the farm produced various small fruits as part of the Bonnieheath Fruit Farm.

Red barn boards from the original bank barn which was torn down in 1976 were

repurposed by Anita's father to make tobacco boxes, and now have been repurposed again to make a welcome sign.

The Buehners have created a museum inside the barn that depicts the natural and cultural history of the property dating back to when the glaciers receded about 13,000 years ago, including fossils and aboriginal artifacts such as arrow heads, grinding stones and axe heads. Old photos of the Colonel, his family and the buildings on the property are also on display.

An old brick silo that was slated for demolition on a neighbouring property was salvaged by the Buehners. A portion of the silo was reconstructed at their farm to make a new entrance for the store and tasting area located in a former tobacco pack barn. The history of the silo and the

farm where it was originally located are captured in a display inside the silo.

The Buehners also encourage visitors to enjoy the natural features of their property. A walking trail takes visitors by the Buehner's environmental projects that promote biodiversity, an area planted to native prairie grasses and a wetland, and anyone can sit in the gazebo and take in the buzzing of the bees and the sounds of the birds. (www.bonnieheathestate.ca)

Resources

- *Gardens in the Spirit of Place* by Page Dickey (2005).
- *The Authentic Garden: Five Principles for Cultivating a Sense of Place* by Claire E. Sawyers (2007).



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YOUR EYES – KEEP THEM IN TIP-TOP SHAPE

You only get one set of eyes, and you want to maintain their good health throughout your lifetime.

As you age, your risk for macular degeneration, cataracts, and even glaucoma increases, and you may not even be aware of these until your vision changes. By then, it might be too late.

The macula is a small but dense cluster of nerve cells that sits at the back of your retina and processes the images you see, sending them to your brain for interpretation. With age the cells don't work as well and age-related macular degeneration is the result, leaving you with reduced vision in the middle of your normal visual field.

About a million Canadians may have age-related macular degeneration, many of whom don't even know they have it.

Cataracts affect about 2.5 million Canadians, especially older people. Your lens becomes cloudy and it's like looking through a frosted window. Luckily, cataract surgery is straightforward and replaces your clouded lens with a clear artificial one.

About 250,000 Canadians have glaucoma, which is an increase in the pressure in your eye ball so it feels more like an apricot pit than a grape. The higher pressure can cause damage to your retina and reduce your vision, but unfortunately glaucoma has few symptoms.

Taking care of your eyes will

help prevent these eye problems. One recommendation is to increase your intake of antioxidants such as vitamin A, vitamin C, vitamin E, zinc, leutin, and zeaxanthin. The thinking is that oxidation causes damage to cells, and this can be prevented by antioxidants.

Some studies have shown that antioxidants can reduce the risk of age-related macular degeneration and cataracts, and as a result you will find many "eye health" vitamin formulations on pharmacy shelves. But you don't necessarily need a supplement. Eating a diet rich in leafy green vegetables will provide antioxidants.

Don't take your eyes for granted. A regular comprehensive eye examination is a great idea to ensure good eye health. It will catch any warning signs of vision changes, maybe even before you have any symptoms or notice any changes. And, if you do notice visual changes, don't dismiss them as just getting older. Get them checked.

Also, pay attention to your family history of eye health. Macular degeneration, cataracts, and glaucoma do seem to have genetic tendencies.

Of course, eat a healthy diet including those antioxidants, but also include omega 3-rich foods like salmon, tuna, halibut. Try to keep a healthy weight, because, while it's not the weight itself that can contribute to eye problems, the various diseases that are associated with being overweight certainly can.

Your retina needs a good blood supply to keep cells supplied with oxygen and healthy. Diabetes and high blood pressure, two diseases that are linked to being overweight, reduce blood flow resulting in retina cell death and vision loss.

Smoking is not a good health choice, and it can also contribute to loss of blood flow in the eye as well as clouding of your lens and cataracts.

Wearing the correct protective eye wear is so very important, even if you are just performing some "quick task." And, when you are outdoors, don't forget to wear your sun glasses with ultra violet light protection.

Also take a break from the computer screen from time to time. The 20-20-20 rule works well; about every 20 minutes, look away from the computer screen about 20 feet in the distance, for about 20 seconds.

And remember, do take care of your peepers, because you only have one set! **CG**



Marie Berry is a lawyer/pharmacist interested in health and education.

NEXT ISSUE

Technology is everywhere these days, including in health care. New monitors, new drug delivery systems, and even easier colonoscopies are some of the developments. Next column we'll look at some of the newest approaches to health.

“Your husband’s not home to help out?” The trucker who’d just pulled his semi on to the truck scale in the Hanson’s yard looked a little uncertain. “Shouldn’t you call somebody?”

Elaine bit her lip to keep from saying anything she’d regret. “Don’t worry,” she told him. “I know what I’m doing.”

With her husband Jeff at an intercropping seminar for the day and her in-laws vacationing in Arizona, Elaine was in charge of loading trucks for seed customers. She hadn’t made a mistake yet, but this was a trucker who’d never been in the Hanson’s yard before. She forgave him, mentally, thinking, “He doesn’t know who he’s dealing with.”

Even if she’d been in the mood to enlighten the trucker about the role of women in modern agriculture, she didn’t have time. She needed to get the durum loaded, write up the invoice and get back to the house before four-year-old Jenny woke up from her nap. Elaine and Jeff were still trying to get the paint stain out of Jenny’s carpet from the last time the little girl had played in her room alone.

“We’re all in this together,” Elaine said

Elaine also hoped to have a chance to make some coffee before her neighbour came by. Not that Tara Hunter wouldn’t understand a delay, it was just that Tara had seemed a little distressed when she’d called to invite herself over.

Tara was a few years older than Elaine, but the Hunters lived just down the road. The two women had first met at a neighbourhood baby shower not long after Elaine had moved out to the farm. They’d laughed at the same jokes and become friends quickly. Now that they were old enough, Tara’s two

A call for help

They hadn’t seen Tara for a while, but it’s good she came today

daughters babysat for the Hansons quite often.

Truck weighed, Elaine guided the trucker to the right bin and got out her stopwatch to time the auger while the durum flowed into the truck. The older man looked on skeptically.

It wasn’t unusual for Tara and Elaine to meet for coffee. What had caught Elaine’s attention was the tone of Tara’s voice. She’s sounded upset.

“That’s likely good,” she told the trucker, waving him back to the scale to weigh up his load. She thought she heard him mutter, “We’ll see how she did,” but she decided to ignore him.

She was vindicated at the scale. Only two bushels short on a 1,000-bushel load. Not bad, she thought to herself. He gave her a grudging nod as he signed the scale ticket. “Guess you do know what you’re doing.”

Tara drove into the yard just as Elaine was on her way back to the house. Elaine smiled and waved. Tara waited for her on the steps.

When Elaine got there, she took Tara by the arm. “Let’s go in,” Elaine said. “I’ll put on some coffee. Unless you want something stronger?”

This made Tara laugh. “Better stick with coffee, I think.”

When they were settled into the comfy living room chairs with mugs of hot coffee, Elaine looked at Tara expectantly, and Tara started to talk. “Is that a new picture?” she said, pointing up at a new family portrait in the wall in the corner. “Who took that?”

Elaine looked her friend in the

eye. “Did you really come over here to talk about photographers?”

That made Tara smile.

“I guess not.”

“What’s going on?” Elaine asked.

They’d only known each other a few years, but this wouldn’t be the first time they’d helped each other through a rough time. When Elaine had trouble adjusting to life at home with her first baby, alone during the day while Jeff was out in the field, Tara had understood perfectly. “I felt the same after Madison was born,” she’d told a weeping Elaine. When Tara found out her mother died, she’d called Elaine to sit with her until John could get home.

Today, Tara started slowly. “March is a very long month,” she said.

“You’re telling me,” Elaine tried to help.

“There’s been so many days that the sky is just... grey,” Tara said.

“With the grey snow in the fields, you can’t tell where the land ends and the sky starts,” Elaine said.

“Exactly,” Tara said. “All that grey. But hardly any snow.”

Elaine nodded.

Once she got started Tara picked up speed.

“We don’t know what’ll happen with the winter wheat. All that time in the cold with no cover.”

“Good question,” Elaine said.

“And if we don’t get some moisture, I don’t know what we can plant that’s going to grow. And these prices aren’t helping anything.”

Elaine kept nodding. “Jeff and I

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REFLECTIONS

BY ROD ANDREWS

RETIRED ANGLICAN BISHOP

have been changing the numbers in our spreadsheets almost every day, trying to find a way to make things look better.”

“John... John’s not coping too well.”

“Oh?” Elaine said.

“Then yesterday...”

“Yesterday?” Elaine prompted.

“I shouldn’t talk about this.”

“It’s just between us,” Elaine reassured her.

“We got a notice from the bank. The five-year fixed-rate mortgage on those two sections of land we bought from Gustafsons is up for renewal. These higher rates are going to take more cash than we planned. Never mind the interest on the operating loan. And the bill for the combine repairs from last fall, when John’s brother put that rock through the header.”

Elaine just kept nodding. She knew exactly what Tara was going through.

“It’s not so bad for me,” Tara said. “I’m so busy driving the girls to all of their skating and gymnastic stuff. Planning the garden. I’ve been doing lots of painting, since I fixed up that great space in the basement.

“But John... he just can’t think about anything besides the farm. He spends most of the day in his office, staring at his computer screen. He’s been grinding his teeth so much at night, I can’t believe there’s any enamel left.”

“Has he talked to anyone?”

“Are you kidding?” This made Tara smile. “John barely talks to me! He’s not going to talk to a stranger.”

Elaine knew John was stubborn, and proud. And she wasn’t sure she’d be able to get her own husband to go to a counsellor, if it was Jeff in these circumstances.

“Maybe he could talk to Jeff?”

Tara looked doubtful.

“Jeff could take him out. Ice fishing, maybe? Before it’s too warm?”

“Maybe,” Tara said. “But John would figure out it was a setup.”

“John getting a little mad might be better than other things that could happen.”

Tara nodded.

“It’s funny,” Elaine said. “Why is it so much easier to deal with a crabby trucker or learn to load a truck or do the books than it is to know what to do when someone gets depressed?”

“Nobody expects it to happen in their family,” Tara said sadly.

“What’s going to happen?” said Jenny, appearing at the end of the hallway, groggy from sleep with her hair standing up on one side and a ragged blanket dragging behind her.

Tara looked down at her watch. “It’s late! I have to pick Madison up after school.” She stopped by the door to put on her coat. “Thanks,” she said quietly.

Elaine hugged her friend. “We’re all in this together,” she said. “Come back tomorrow.”

“I will be back after seeding.” Some students at our flying school are farmers. When seeding time approaches, flying lessons go to the back burner. With the crop in the ground, they will take a few more lessons. They will break again for spray season. The annual cycle is predictable and relentless.

We are constantly constrained by time. Life is an unending struggle to meet schedules and get things done. Fitting a multitude of tasks into each day is a challenge.

People in Hawaii were focused on the shortness of life and the value of time recently. An emergency message advised them to seek cover immediately. “BALLISTIC MISSILE THREAT INBOUND TO HAWAII. SEEK IMMEDIATE SHELTER. THIS IS NOT A DRILL.” One family climbed into a bathtub and pulled a mattress over their heads. A couple, visiting from Saskatchewan, felt helpless in the face of impending disaster. They sat in their hotel room looking out a picture window at the beach and the ocean.

Jesus and his followers are in Jerusalem. They are gazing at the temple. It dazzles in the sunlight. Jesus, their tour guide, says, “All this will be rubble, ruins, not a stone left.” His companions ask, “When, teacher, when will this be? Give us some warning, some sign so we can know when.”

Jesus does not respond with a countdown or a calendar. He does not help them calculate a date for the end of the world. The clues, the signs, are wars, rumours of wars, earthquakes, and famines. Unfortunately, these calamities are still with us. Wars, earthquakes, famines and plagues persist. The enemies, strategies, weapons and targets change, but the constancy of war remains. Many of our fellow humans do not have enough to eat. Clean water is a scarcity for millions of people. Will the world come to an end?

Jesus has something to say to our fears of living in dangerous times. He does not promise to rescue us from the world’s distress. He speaks about signs, things to watch out for. They are not useful for predicting how long we have. The signs tell us the most important day is the one that dawned this morning. The message is “Do not be alarmed. Do not be terrified. Don’t fill up your time with anxiety and fear.” We need to live each and every day well. Today and now is all we really have. Each day is a gift, an opportunity to show love, not fear.

How do we spend our time in a world that keeps reminding us how little time we have? A cartoon in the *New Yorker* depicted a couple dashing up the steps of the Louvre in Paris shouting, “Where’s the Mona Lisa? We’re double-parked!”

Physically, mentally and emotionally many of us are double-parked. We are in a perpetual hurry! Schedule is our master; the clock our ruler. If we miss a green traffic light, we are uptight. We do not make time for conversation, friends, family and community service. As we grow older the days seem to speed up. With the effort of getting up, receiving visitors, preparing meals and going for medical appointments, bedtime is a welcome relief. We expect more spare time in our senior years, but it is an elusive commodity.

St. Francis loved animals and nature. He was hoeing his garden when a friend asked, “What would you do if you knew this was the last day of your life?” Francis replied, “I would finish hoeing my garden.”

Suggested Scripture: Hebrews 10:19-25; Mark 13:1-8

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