Three HR red flags to watch for ▸48 | Eliminate your farm's generation gap ▸56

CountryGuide

Strategic. Business. Thinking.

WESTERN EDITION / COUNTRY-GUIDE.CA / FEBRUARY 14, 2017

CUSTOM BUSINESS

Custom farming works for Troy Monea. Will it work for you too? ▸22

Beyond the family

Alberta's Tom and Margaret Towers open up to help new farmers get their start ▸28

CROPS GUIDE

Taking aim at wheat acre decline ▸33

Busting through canola yield limits ▸36

Publications Mail Agreement No. 40069240


BAYER
INFINITY® FX
THE BROADLEAF PREDATOR
It's time to get territorial. Strike early, hard and fast against your toughest broadleaf weeds.
Lethal to cleavers and other broadleafs, Infinity® FX is changing the landscape of cereal weed control.
NEW
BAYER Bayer
EARLY BOOK BY MARCH 17, 2017
SAVE UP TO $2/ACRE
ASK YOUR RETAILER FOR DETAILS
cropscience.bayer.ca/InfinityFX 1 888-283-6847 @Bayer4CropsCA
Always read and follow label directions. Infinity® is a registered trademark of the Bayer Group.
Bayer CropScience Inc. is a member of CropLife Canada.
O-52-01/17-10686444-E

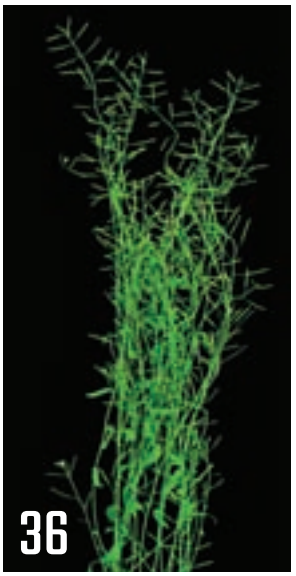
MACHINERY

More new tractors from McCormick

The Italian manufacturer adds to its North American line-up, with new technology too.

Inside

COUNTRY GUIDE / VOL. 136 ISSUE NO. 3 / FEBRUARY 14, 2017



CROPS GUIDE

GUIDE LIFE

BUSINESS

Custom business

It takes strict business discipline and an intense focus on customer relations for farmers like Alberta's Troy Monea to succeed as a custom operator in Canada these days. And watch out that Revenue Canada doesn't reclassify you as a non-farmer!

How many farmers do we really need?

Probably we don't 'need' nearly as many farmers as we have today, but only if you ignore the way that farmers' business skills are transforming the world of agriculture

There are some three million truck drivers in the U.S. today, and another 200,000 in Canada.

Except, their jobs depend on their employers not using the self-driving technology that is already in use on farms all across North America.

While we're all fixated on all the disruptions that Donald Trump is creating, most of us seem to be mere bystanders to the equally large disruptions that technological advance is causing, or is about to cause.

I tend to veer away from doomsayers, but it's worth an hour of your time to type "artificial intelligence" into Google sometime and then wander about in the kind of extremism that the foes and friends of the Donald are quite at home with.

But also check out someone like Andrew McAfee, an economist at MIT who puts great effort into toning down the rhetoric, but who still insists that it's time we all started thinking seriously about how to live in a world where, suddenly, intelligent technology is putting white-collar workers out of work, not just truck drivers.

Farmers have long felt that they are special cases in this debate with their tireless argument that if we hope to feed the world, we must base our decisions on science.

We as a society can somehow figure out how to distribute the food in order to prevent starvation, farmers tend to believe, but only if we have access to the tools we need to grow the food in the first place.

As more jobs come under threat from artificial intelligence, I suspect, we'll continue to see farmers on the one hand clamouring for better access to technology, while other professions, unions and even whole industries rush to adopt new rules or regulations that put the brakes on that new technology.

But even in agriculture we tend to underestimate the power of technology. Despite the fact that technology has been uninterrupted in its success at whittling down the amount of time it takes to farm an acre, and although it has been equally successful at enabling an uninterrupted increase in average farm size, we tend to think these trends have pretty much reached their limits.

So, let's ask the question again: how many farmers do we really need?

But before you reach for the Prozac, let's also take another look at what MIT's McAfee is telling us. Technology isn't only a threat, he says. It also puts more power into the hands of innovative entrepreneurs.

It's why I don't believe that Canada will ever be farmed by six farmers, because not only are today's farmers better capitalized than ever, they are being led by farmers who are better than ever at protecting and enhancing that capital. More than ever before, they excel at being innovative without putting their farms at risk.

Now, the big question is, how can we ensure the next generation is even better than today's at these essential business skills?

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

CountryGuide
Strategic. Business. Thinking.

1666 Dublin Ave., Winnipeg, MB R3H 0H1
(204) 944-5765 Fax (204) 944-5562

EDITORIAL STAFF

Editor: Tom Button
12827 Klondyke Line, Ridgetown, ON N0P 2C0
tom.button@fbcpublishing.com
(519) 674-1449 Fax (519) 674-5229

Senior Editor: Maggie Van Camp
mvancamp@fbcpublishing.com
(905) 986-5342 Fax (905) 986-9991

Production Editor: John Morriss
john.morriss@fbcpublishing.com

Field Editor: Lisa Guenther
lisa.guenther@fbcpublishing.com

Field Editor: Shannon VanRaes
shannon.vanraes@fbcpublishing.com

Online Editor: Greg Berg
country-guide.ca

Design & Layout: Jenelle Jensen

ADVERTISING SALES

Sales Director: Cory Bourdeaud'hui
cory@fbcpublishing.com
(204) 954-1414 Fax (204) 944-5562

Lillie Ann Morris
lamorris@xplornet.com
(905) 838-2826

Kevin Yaworsky
kyaworsky@farmmedia.com
(250) 869-5326

Advertising Services Co-ordinator: Arlene Bomback
ads@fbcpublishing.com
(204) 944-5765 Fax (204) 944-5562

Glacier FarmMedia President: Bob Willcox
bwillcox@farmmedia.com

Publisher: Lynda Tityk
lynda.tityk@fbcpublishing.com

Editorial Director: Laura Rance
laura@fbcpublishing.com

Production Director: Shawna Gibson
shawna@fbcpublishing.com

Circulation Manager: Heather Anderson
heather@fbcpublishing.com

COUNTRY GUIDE is published 13 times per year by Glacier FarmMedia LP. Subscription rates in Canada — Farmer $45 for one year, $67 for 2 years, $95 for 3 years. (Prices include GST) U.S. subscription rate — $35 (U.S. funds). Subscription rate outside Canada and U.S. — $50 per year. Single copies: $3.50.

CCAB

Publications Mail Agreement Number 40069240.

We acknowledge the financial support of the Government of Canada through the Canada Periodical Fund of the Department of Canadian Heritage.

Canada

Canadian Postmaster: Return undeliverable Canadian addresses (covers only) to: Circulation Dept., PO Box 9800, Winnipeg, Manitoba R3C 3K7.

U.S. Postmaster: Send address changes and undeliverable addresses (covers only) to: Circulation Dept., PO Box 9800, Winnipeg, Manitoba R3C 3K7.

Subscription inquiries:
Call toll-free 1-800-665-1362
subscription@fbcpublishing.com
U.S. subscribers call 1-204-944-5766

COUNTRY GUIDE is printed with linseed oil-based inks.
PRINTED IN CANADA
Vol. 136 No. 3

www.agcanada.com ISSN 0847-9178

SEE Technology
TOUCH Innovation
BE Empowered

See the latest crop and seed products at Western Canada's only outdoor farm expo!

Join us at the third annual **Ag in Motion** on **July 18 - 20, 2017**.

It's a unique opportunity to get up close and personal with today's agricultural technology. Experience live demonstrations of field equipment, crops, livestock and services all together on 320 acres 15 minutes north west of Saskatoon.

Ag in Motion™

Western Canada's Outdoor Farm Expo

SEE Technology **TOUCH** Innovation **BE** Empowered

www.aginmotion.ca

More new tractors from McCormick

The Italian brand adds both low- and high-spec utility models

BY SCOTT GARVEY / CG MACHINERY EDITOR

For several years now, ag machinery has been all about technology. But the more advanced our tractor design becomes, the more push-back we see from a segment of the market demanding machines without all the newest features and technology. After all, tractors have been doing farm chores since the early part of the last century without computer control, and many buyers, especially those looking for utility and mid-horsepower models, believe a more basic level machine is still the right choice — and cheaper too.

As a result, all brands have broadened their offerings in recent years to cater to both the high- and the low-tech market preferences that have emerged, particularly in the 80- to 160-horsepower range.

So, at the Farm Progress Show in Iowa last year, when AGCO introduced its expanded line of lower-spec but still capable Global Series tractors in that size group, it wasn't alone. Not far away on the show grounds, Italian tractor builder Argo was also debuting lower-cost additions to its McCormick brand as well, with its new X7 Pro-Drive Standard models.

In all, McCormick's X7 Pro-Drive Standards add three new models to the existing X7 line. These tractors are "reduced specification" versions with 135, 152, and 159 rated engine horsepower. (Overall, the combined offerings in the X7 Series span the 131 to 181 horsepower range.)

For the time being, the X7 line is the largest of McCormick's updated X Series models available in Canada. Over the past few years, the brand has gradually introduced other new X Series models across its product range, such as the X5 and X6, replacing older designs. Look for that process to continue when the brand eventually introduces a North American version of the larger 264 to 310 horsepower X8 models some time in the not-too-distant future, probably late 2017.

As "economy" models, the new X7 Pro-Drive Standards will offer a shorter list of available options to appeal to what brand marketing reps calls "the price-sensitive market." But in the corporate press release announcing the tractors, McCormick was quick to point out that the driveline components in these new lower-spec models are the same as those used in the other X7 models, "The meat of the tractor has stayed the same," reads the company press release. "Only the bells and whistles have changed."

That means the X7 Pro-Drive Standards get the

The new Pro-Drive Standard tractors add lower-spec "economy" models to the existing X7 line.

PHOTO: MCCORMICK

Above: The Pro-Drive Standard models get the same cab interior and control layout as the other models in the X7 Series.

PHOTO: MCCORMICK

Right: Until North American verions of the X8 line — shown here making their debut at Agritechnica 2015 in Germany — are available in Canada, the X7 line remains the largest of the brand's newest X Series designs to compete in the Canadian marketplace.

PHOTO: SCOTT GARVEY

same 4.5 or 6.7 litre BETAPOWER diesel engines and power-shift transmissions, which offer four power-shift gears and six synchronized ranges with fully automatic shifting.

Pro-Drive Standard models maintain the same control layout inside their cabs, too, along with the ability to include additional mechanical hydraulic remote valves. And, surprisingly for an "economy" model, the Pro-Drive Standard models get a closed-centre hydraulic system with a variable displacement pump that can push out 123 l/min. To ensure the steering wheel doesn't get jerky when there are large hydraulic demands from an implement or attachment, the steering system gets its own dedicated 44 l/min flow.

At the rear, the tractors can be equipped with both standard and economy 540 and 1,000 r.p.m. modes. Economy PTO settings allow the engine to spin at lower rpm while maintaining shaft speed to reduce fuel consumption when handling lighter loads.

Having covered off the lower-spec market with the Pro-Drive Standards, McCormick also introduced new higher-spec models, which offer premium features, for the other end of the market spectrum. The two X7 VT-Drive tractors offer 140- or 175-rated engine horsepower through a 50 km/h-capable CVT transmission. (They were actually introduced a few months before the Pro-Drive Standard versions.)

The CVT gives the operator four adjustable ranges and four operating modes. Although the Pro-Drive Standard and VT-Drive models get similar base specifications, there are notable differences.

The VT-Drive models can be fitted with up to five rear remotes, which is a jump up from the limit of four on the Pro-Drive Standards. But the hydraulic flow rate remains the same at 123 l/min. The lower-end line's rear PTO options come standard on the VT-Drive models. And the steering system comes guidance ready on the higher-end versions.

One other noticeable difference is at the rear three-point hitch. Lift capacities are much different. The VT-Drive tractors get a 9,300 kg (20,500 pound) rating, making them better suited to handling mounted implements. The Pro-Drive Standards can only muscle a significantly lower 6,300 kg (14,000 pound) lift. But if all you need to move is round bales to feed cattle, that's more than adequate.

To improve its corporate performance and ability to deliver new models along with product support in Canada, McCormick's North American operations have recently been united. Previously U.S. and Canadian operations were separate. Now, a single brand entity will service both countries. According to Taylor Grout, North American marketing and product manager, that should allow McCormick to improve its service delivery on this side of the Atlantic. **CG**

What do your customers care about?

Check out the mainstream books, films and other media that are shaping what consumers think about what you do

BY HELEN LAMMERS-HELPS

Gluten-free, organic, GMO, free-run — these just hint at the kind of vocabulary being tossed about by consumers today. Packed with good intentions and a little knowledge, such notions are warping the demand for food products, and they may be laying a path for legislation.

Never before has there been so much being written, said and shown about food. Through TV, blogs, TED talks, podcasts, social media, celebrity chefs, movie streaming services, and good old-fashioned books, consumers are constantly getting told what to think about our food supply.

Some of it's good. Some of it isn't. Either way, though, it shapes public opinion and drives food choices.

To help keep up, *Country Guide* asked food trend watchers to share the books, documentaries and other sources of information they think have done the most to influence popular opinion on food and food systems in the past decade.

Delving into these sources, you'll have a better appreciation of where your customers are coming from.

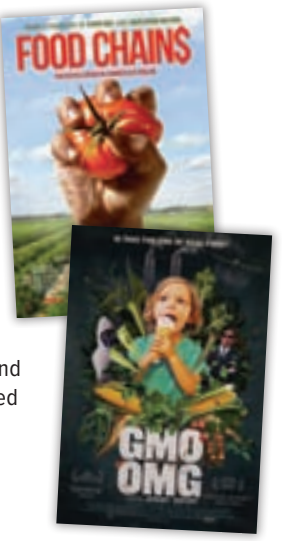
This is only a sampling, but it's enough to open our eyes. For availability, see the note below.

DOCUMENTARY FILMS

Fed Up
Narrated by TV celeb Katie Couric, this 2014 film looks at the fattening of America, pointing the finger at how the lobbying power of "Big Sugar" blocks attempts to apply restraint.
www.fedupmovie.com
Available on Netflix.

Food, Inc.
The 2008 American documentary film that looks at how production agriculture and the food industry have changed over the past 50 years.
www.takepart.com/foodinc
Available on Netflix.

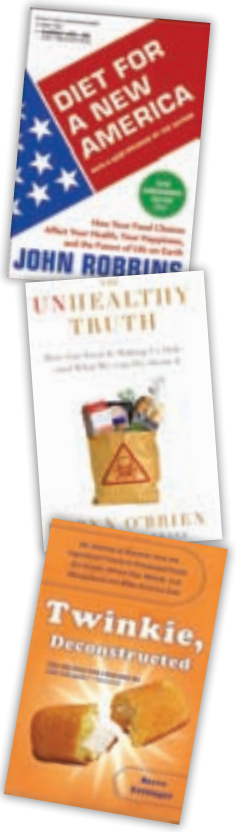
Just Eat It: a food waste story
A 2014 Canadian film that shines a spotlight on the food waste issue.
www.foodwastemovie.com
Available online at www.knowledge.ca/program/just-eat-it



Food Chains
A 2014 American documentary about agricultural migrant labour in the United States.
www.foodchainsfilm.com
Available on Netflix.

GMO OMG
As you can guess from the title, this 2013 documentary explores the health and environmental risks of genetically modified organisms (GMO) and the implications of GMO labelling.
www.gmofilm.com
Available on Netflix.

BOOKS WORTH READING



Diet for a New America: How Your Food Choices Affect Your Health, Happiness and the Future of Life on Earth
By John Robbins (2012) — In this update of his 1987 book, Robbins examines the moral, economic and emotional cost of American food choices (also on DVD).

The Unhealthy Truth: One Mother's Shocking Investigation into the Dangers of America's Food Supply — and What Every Family Can Do to Protect Itself
By Robyn O'Brien (2010)
www.robynobrien.com

Mother of four, Robyn O'Brien chronicles her journey to understand what triggered her infant daughter's food allergy and the discoveries she makes about the American food system along the way. O'Brien has been likened to food's Erin Brockovich.

You'll also find O'Brien's podcasts on her website and through iTunes.

O'Brien also summarizes her journey in a TEDx Talk which can be viewed here: tedxtalks.ted.com/video/TEDxAustin-Robyn-OBrien-2011.

Twinkie, Deconstructed
This 2007 book by Steve Ettlinger is a result of his quest to understand the ingredients in packaged foods prompted by his young daughter's question: "Daddy, where does Polysorbate 60 come from?" www.twinkiedeconstructed.com

What to Eat
This 2007 book by Marion Nestle claims to cut through the jargon to help readers make informed and sensible food choices. www.foodpolitics.com/what-to-eat-an-aisle-by-aisle-guide-to-savvy-food-choices-and-good-eating/

The Conscious Kitchen: The new way to buy and cook food to protect the earth, improve your health and eat deliciously
This 2010 book by Alexandra Zissu is intended to be a practical resource to help people make good food choices. www.alexandrazissu.com/az-blog/the-conscious-kitchen/

Clean Food: A Seasonal Guide to Eating Close to the Source
(Revised edition, 2012) By Terry Walters
The Clean Food cookbook contains recipes for healthy meals that are "closer to the source." terrywalters.net/

Wheat Belly: Lose the Wheat, Lose the Weight, and Find Your Path Back to Health
By William Davis, MD (2011)
While highly controversial, there is no doubt this book by a cardiologist has influenced the wheat-free movement.

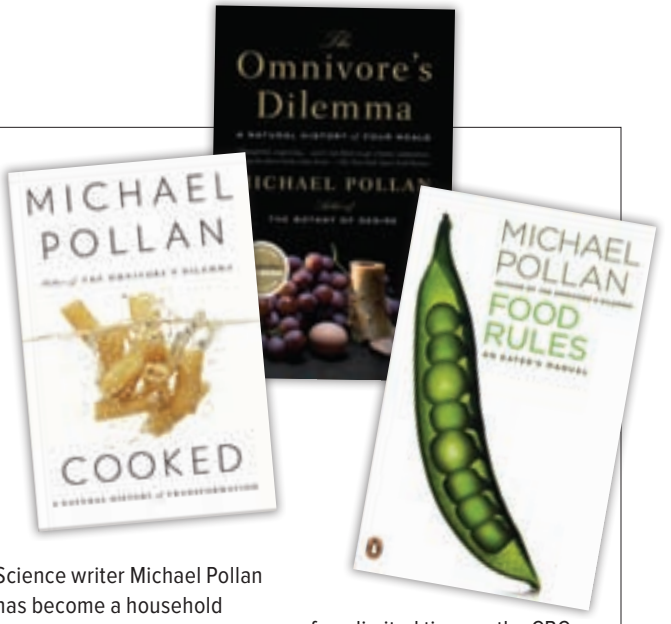
In addition to the books and documentaries, there are some individuals who have been influential on the food scene.

*Mark Bittman, cookbook author and former New York Times food columnist, has promoted Meatless Monday, a global food movement active in 44 countries. www.meatlessmonday.com/the-global-movement/

*Jamie Oliver, world-renowned chef and food campaigner, is on a mission to end childhood obesity by promoting healthy eating, good government food policies, and food literacy. www.jamiesfoodrevolution.org

*Closer to home, chef Michael Smith, with his focus on simple, fast, healthy family meals and his work with Canadian pulses (lentils, dried beans, chickpeas), is making an impact. www.chefmichaelsmith.com

Note: Books may be available through your local library as e-books, audiobooks or in print. Local libraries may also have films on DVD. If the local library system doesn't own a book, they may be able to access it for you through an Inter Library Loan. Many documentaries are available online through sites like iTunes, YouTube or through video streaming services such as Netflix (which currently allows you to sign up for one month free). TVO, PBS and CBC and other networks may be air them or make them available through their websites.



Science writer Michael Pollan has become a household name when it comes to food. You'll find his many books listed on his website at: michaelpollan.com/books/.

In his 2007 book, The Omnivore's Dilemma: A Natural History of Four Meals, Pollan follows food chains including organic from source to plate, developing an account of what Americans are eating and the health implications.

In Defense of Food: An Eater's Manifesto, published in 2009, Pollan proposes "a new (and very old) answer to the question of what we should eat that comes down to seven simple words: Eat food. Not too much. Mostly plants." Pollan's documentary, by the same title, is available for a limited time on the CBC website at www.cbc.ca/passionateeye/episodes/in-defence-of-food.

Food Rules: An Eater's Manual (2011) — If looking for a quick read on this subject, this is it.

Cooked — Michael Pollan's 2013 book, has been turned into a four-part video series available for viewing on Netflix. Pollan explores the power of the four elements — fire, water, air, and earth — to transform the stuff of nature into delicious things to eat and drink. He charts the development of grilling with fire, cooking with liquid, baking bread and fermenting everything from cheese to beer.

LOOKING FOR MORE?

Food Tank is a U.S.-based non-profit organization with a focus on spotlighting environmentally, socially, and economically sustainable ways of alleviating hunger, obesity and poverty, world-wide. You'll find a list of food advocacy films and books on their website at www.foodtank.com.

Films
foodtank.com/news/2013/09/twenty-six-films-every-food-activist-must-watch

Books
foodtank.com/news/2016/05/food-tanks-summer-2016-reading-list

Fill the youth gap

Here's how to inspire and recruit the next generation of ag employees

BY BECKY PARKER / NUFFIELD SCHOLAR

"What do you want to be when you grow up?" It's a common question that adults ask young people. Popular answers include pro athlete, doctor or lawyer, or you might just get a shrug of the shoulders and an "I don't know."

Unfortunately, careers in agriculture and food rarely make it to the top of these lists. But perhaps this is because youth have a difficult time identifying careers in agriculture beyond "farmer."

The popular perception of a career in agriculture is that it is in the field or in the barn, working long hours in tough conditions for low pay.

Indeed, there is enough reality in this common perception to make it tough to sell the idea of building a satisfying, rewarding career in agriculture.

In fact, negative perception is one of the factors which contributes to the serious shortage of the agriculture labour in Canada.

IDENTIFY THE ISSUE

If you work in the agri-food sector you have probably heard the numbers from the Canadian Agriculture Human Resource Council (CAHRC). The current gap between the supply and the demand for agri-food workers is 59,000, and the result of that gap is that $1.5 billion in sales are foregone each year.

And it's getting worse. CAHRC estimates that within 10 years the Canadian agri-food sector could be unable to find workers for 114,000 jobs.

Perhaps most scary is that these numbers only reflect the situation in primary production. The labour shortage is pervasive across the food system, impacting the productivity and profitability of agribusinesses in this country.

It is not just farm workers we require. The sector needs food scientists, salespeople, meat cutters, robotic engineers… you get the picture.

FOCUS ON GEN Z

So what can be done to tackle the issue? Temporary foreign workers will need to be an ongoing source of labour for the agri-food sector. However, there is another group that we should be focusing our recruitment attention on: Gen Z.

You have probably heard of the Millennials, but

maybe not Gen Z. So pay attention. These are the youth who are born between 1993 and 2011. They make up 22 per cent of the Canadian population and will be entering the workforce over the next 20 years.

Many Gen Zers are sitting in high school classrooms right now, ready to make their career decisions. The question is, how do we direct their attention to careers in the agri-food sector?

It is a question I have been asking for the last two years as a 2015 Nuffield Canada Scholar, partly thanks to funding from the *Country Guide* family of publications.

SEARCH FOR SOLUTIONS

The premise of a Nuffield Scholarship is to investigate agriculture around the world in order to identify approaches and strategies that can be applied to industry issues. As a Nuffield scholar, I had the incredible opportunity to travel internationally to research my selected topic: agriculture career education.

My travels took me across Canada, as well as to France, Scotland, England, New Zealand, Australia, Jamaica and the United States.

Not surprisingly, many other countries around the world are also experiencing labour shortages in agriculture. Indeed, some of the countries I travelled to, such as the United Kingdom and Australia, were facing the same perception issues that we have here in Canada. Youth are quick to name "farmer" as their prime example of an agri-food career, and the urban/rural divide continues to place pressure on the image of agriculture by affecting what young people think it means to work in the sector.

PHOTO: FARM BOY PRODUCTIONS

FIND THE "AH-HA" MOMENT

At the beginning of my scholarship, I was warned that "ah-ha" moments could arrive unexpectedly, and that they could have a major impact on how I viewed my topic. One of those moments hit while I was in Australia.

After a series of back-to-back meetings in the heart of Sydney's CBD (Central Business District), I was walking downtown amid a crowd of hundreds of business people. I wondered: how many of them know that dozens of agribusinesses are centred right next to the big investment firms and ad agencies?

If people don't know these businesses exist, why would they ever think of working for them?

Shortly after, I passed a giant three-storey Apple store. I immediately thought "that is a place where young people want to work." It's visible. It's edgy. It makes you want to see yourself there.

I started to shift my thinking to marketing, considering how companies like Apple and Google build a loyal customer base while also becoming a desirable place to work. It turns out there is a formula for building brand loyalty, and it applies as much to selling ag careers as it does to selling iPhones.

However, for the formula to work, the agri-food sector needs to play a major role, using its three steps (exposure, engagement, and influence) to encourage youth to select a career in agriculture and food.

STEP 1: INCREASE EXPOSURE

Given the limited (and sometimes inaccurate) perspectives that young people have of agri-food careers, the first step must be to increase their exposure to a wide variety of agriculture careers.

One of the ways this is achieved is through activities like Career Competitions. A pilot of this was facilitated by AgScape (Ag in the Classroom — Ontario) in September 2016, in collaboration with AgCareers.com and Canada's Outdoor Farm Show (see photo above). I was thrilled to see this program come to life here in Canada since it is modeled on the New Zealand Young Farmers' Get Ahead Day, which I saw during my studies.

Ag businesses can easily participate by partnering with organizations like AgScape, local fairs and ag education committees to run a career station at this type of activity. It is incredibly valuable for students to see a real life example of people working in exciting ag careers, and it is a wonderful avenue for agribusiness to showcase some of the lesser-known occupations within their organizations.

STEP 2: PROVIDE ENGAGEMENT OPPORTUNITIES

Once students have had their minds opened to the diversity of careers in agriculture and food, it is important to

CONTINUED ON PAGE 12

Consider Nuffield

A Nuffield scholarship helped me help our industry. It could help you too

BY BECKY PARKER

In the agri-food sector, we often focus on growth. We think about the growth of our crops and livestock, the growth of our profit margins, the growth of our customer base and brand recognition, and more.

However, sometimes we forget to focus on the growth of ourselves.

If you are passionate about your business, committed to the future of Canadian agriculture, and looking for a personal growth challenge, you should consider applying for a Nuffield Scholarship.

Speaking from experience, here are three of the biggest impacts a Nuffield Scholarship will have on you:

1. APPLY YOUR PASSION

Applying to Nuffield is about seeking information on a topic of personal importance and interest. Do you have an issue on your farm that you want to address? Is there a challenge facing your industry? A Nuffield Scholarship is your chance to explore that through international travel. Think about the difference you can make for Canadian agriculture through applied research.

2. OPEN YOUR MIND

Nuffield is about a global experience. There is nothing like talking to farmers and agribusiness people from other countries to highlight the similarities and differences agriculture faces around the world. You will be challenged to look at things from a global perspective and to consider approaches and solutions you may never have considered before. You will grow professionally, and you will grow personally.

3. BUILD YOUR NETWORK

If you talk to anyone who has completed a Nuffield Scholarship, you will hear that it opens doors. You will have the opportunity to become friends with people around the world, many of whom will open their homes to you and help you on your journey. Nuffield is also a key to open the doors to new business contacts who are eager to share their knowledge and learn from your experiences.

If you have questions, reach out to the past and present scholars to hear their experiences.

Don't miss this opportunity! Nuffield Scholarship applications are due each year on April 30.

Find out more at www.nuffield.ca.

provide them with the opportunity to try that career out. Hands on learning experiences are among the best ways for youth to assess whether they may be interested in a career in agriculture.

The ag sector needs to do a much better job of offering hands-on opportunities for high school students. Experiential learning can take the form of job shadows, co-op terms, or summer employment. These are low-risk ways to give students a chance to try out a career.

Farms and agribusinesses should connect with local high schools and let them know that they are happy to welcome youth though their doors. Imagine the possibilities opened up by having a high school student on a ride-along, or in a lab setting for the day. Then imagine the opportunities missed by never opening the door.

STEP 3: OFFER POSITIVE INFLUENCE

Most people can think of one or two people who have influenced their career. If we are going to inspire youth to pursue careers in agriculture and food, we have to be effective ambassadors for ag careers and grasp the opportunity to mentor those potential future employees.

It is important to provide a positive influence to those who have shown an interest, through in-person chats, emails, or formal mentorship programs.

It is also important to keep an open mind if someone does not have agriculture experience. Look beyond technical training and abilities to focus on soft skills such as teamwork, initiative and communication. As a mentor, give youth a chance to develop and apply their soft skills. These are attributes which are useful in all types of careers, whether someone is an employee, a leader, or an entrepreneur.

All three of these steps require action. However, they are all feasible. Our labour shortage affects businesses big and small in the food system, so everyone needs to step up to engage Gen Z to fill the gap.

(Note: The full Nuffield report is available at nuffield.ca by searching under Scholars/Reports tab for Becky Parker. Connect with Becky on Twitter: @becky_parker_2, Instagram: @lessonsoftheland Blog: www.lessonsoftheland.com.) **CG**


BAYER
LUXXUR™
HATES WEEDS AS MUCH AS YOU DO.
There's nothing quite like knowing the toughest weeds in your wheat fields have met with a fitting end. Following an application of Luxxur™ herbicide, you can have peace of mind that your wild oats and toughest broadleaf perennials have gotten exactly what they deserve and will no longer be robbing your crop of its yield potential.
SPRAY WITH CONFIDENCE.
Bayer
cropscience.bayer.ca/Luxxur 1 888-283-6847 @Bayer4CropsCA
Always read and follow label directions. Luxxur™ is a trademark of the Bayer Group.
Bayer CropScience Inc. is a member of CropLife Canada.
R-66-01/17-10686443-E

Making ethnic markets pay

In Toronto alone, consumers are buying $400 million a year of imported ethnic vegetables. Could it make sense to grow them here?

BY LOIS HARRIS

Edamame, okra, bitter melon, quinoa, Chinese long eggplant — all these are edible crops that you'd have had a hard time finding on the country's store shelves 50 years ago, let alone growing in Canadian fields and greenhouses.

They're still crops that few Canadian farmers know about, and that even fewer have considered growing.

But maybe that's about to change.

Research into crop varieties and production systems is already underway to help speed such a change. But it will also take a change in farm thinking about whether the opportunity is big enough to justify the cost of breaking into the unknown.

The sector is still extremely small. In Ontario in 2015, for example, only 2,900 acres were planted to specialty crops, with a farm gate value of about $15.5 million.

Yet that's enough to convince enthusiasts that "ethnocultural" crops can be successfully produced, and that they are on the cusp of becoming lucrative moneymakers for growers across the country.

"Opportunities are definitely there to increase production, if growers do their homework to fill niche markets," says Evan Elford, the new crop development specialist with the Ontario Ministry of Agriculture, Food and Rural Affairs.

Elford says that, while there has been a recent upswing in interest, specialty crops have actually been researched and investigated in Canada for 40 years.

"When you look at bok choy and Napa cabbage, they've been around for decades," Elford says.

Such specialty crops are defined as "a broad category of niche crops not included in major grains, oilseed, industrial or horticultural crops," Elford says. "They are considered non-traditional crops that may be new to the region, or are underutilized native species, while others are re-emerging crops previously grown in the province."

Today, three of the most promising new-to-Canada vegetables to come from the Vineland Research and Innovation Centre are okra, Chinese long eggplant and Indian round eggplant.

VINELAND TRIALS

The modern impetus for investigating the crops was a University of Guelph study that determined there are 800,000 Canadians of South Asian descent in the Greater Toronto Area, and they are spending as much as $33 million a month on these kinds of vegetables, almost all of which are imported.

The research strategy is to replace at least some of the imports by developing vegetable varieties that local farmers can grow in Canadian climates.

"The whole objective is to find out if these vegetables could be adapted to Ontario and Canadian conditions," says research scientist Viliam Zvalo.

Zvalo was brought into Vineland's "Feeding Diversity: Bringing World Crops to Market" program in 2014 and has had great success in figuring out the best ways to grow the three crops.

In fact, in 2015, six larger commercial growers and several smaller ones planted 80 acres of the Asian eggplants and okra — mostly in Ontario, but in pockets in Quebec, British Columbia and the Maritimes, as well.

> **Ravi Maharaj, ethnic fresh category manager for Sobeys says his customers are hungry for the vegetables. "We grew the program by 50 per cent this year over last, and had no problems with the suppliers or selling the product."**

PHOTO CREDIT: VINELAND RESEARCH AND INNOVATION CENTRE

EGGPLANTS OF THE FUTURE

"Twenty-four million kilograms of eggplant were imported into Canada in 2014," Zvalo says, adding that the number dropped in 2015 by two per cent, and he speculates that local production was responsible.

In order to thrive, these eggplants must grow on black plastic mulch on raised beds to warm the soil in early spring. Drip irrigation is also a must — and was especially needed during the hot, dry summer of 2016.

Field production of the crop is good, but the greenhouse is much better, yielding 35 kilograms per square metre, which rivals pepper yields. The greenhouse season is also much longer — starting in January and ending in December. Grafting the eggplant on tomato rootstock increases volume by 95 per cent and reduces the disease threat to nearly nil.

Currently, 30 to 35 per cent of eggplants sold in Canada are ethnic, and Zvalo believes that the future is in the ethnic varieties, since they are smaller and easier for consumers to prepare.

With a potential for $5,000 to $9,700 per acre in profits, Asian eggplants are an attractive option for growers, as well.

CONTINUNED ON PAGE 16

Research is making quick strides in learning how to make production of ethnic vegetables, including these eggplants, commercially viable in Canada, says Vineland's Viliam Svalo.

OKRA MAY BE EVEN MORE PROFITABLE THAN EGGPLANT, WITH PRICES AVERAGING NEAR $2.65 PER POUND

Ravi Maharaj, the ethnic fresh category manager for Sobeys, says his customers are hungry for the vegetables.

"We grew the program by 50 per cent this year (2016) over last, and have had no problems with the suppliers or selling the product," he says.

The keys, according to Maharaj, are the demand from South and East Asian consumers, and the freshness of the local product.

"You can get local product picked, packed and on the shelves in three to four days," he says. Imports take five to eight days and get stressed from being put on ships from Costa Rica, the Dominican Republic or Honduras and then transferred to trucks at Miami before reaching their final destinations in Ontario grocery stores.

The Su family started experimenting with Chinese eggplants as part of their personal garden three years ago. When that turned out really well, they decided to start growing them commercially.

"We are a small operation, so we have to grow what no one else wants to," says Henry Su. He and his parents grow green and yellow zucchini, Chinese eggplants and, most recently, jalapenos on 30 acres of sandy loam soil in Norfolk County, Ont. They've been growing eggplants on 10 of those acres for two years.

During the summer harvest, Su drives a truckload of produce every midnight to the Ontario Food Terminal where buyers pay a "decent price" for his specialty eggplants.

"We can't compete on quantity, so we have to have the quality," he says, noting that while the family would like to expand their acreage, they don't want to get so big that they can't keep an eye on everything every day.

OKRA — FINICKY BUT PROFITABLE

Okra is a much more labour-intensive and finicky crop to grow, but if successful, farmers can get fantastic returns on investment.

"You need to get the right number of plants per acre and spacing is critical," Zvalo says, adding that harvesting the pods at their best means picking plants every day during the season — in August and September. Labour — needed for the entire growing season — is a big cost for okra growers.

But the cost of growing it can be offset by the market price that okra commands. While okra yields are about half the eggplant levels, at 20 tonnes per acre versus 35 to 40 tonnes, the price differential is more than double, with okra getting $2.65 per pound versus a pound of eggplant at $1.10.

Six million kilograms of okra are imported into Canada every year. Research trials and commercial operations are growing the crop in British Columbia, Quebec and Ontario — mostly where the highest ethnic populations reside — but there have been experiments in the Maritimes and Manitoba, as well.

The crop can be lucrative, if the conditions are right like the summers of 2015 and 2016, and as long as proper management techniques are used. One grower with a farm near Montreal had five acres of okra in 2015 and sold the crop for about $36,000.

Both Elford and Zvalo caution that anyone looking to grow ethnocultural crops should really research the marketplace, and line up buyers before even thinking about planting. Both have or are developing online tools to help growers better understand the risks and benefits of growing these crops:

OMAFRA Specialty Cropportunities is an online guide to the agronomics, business management and marketing of dozens of specialty crops. It also has a regularly updated blog with information about workshops, meetings, growing tips and advice. www.omafra.gov.on.ca/CropOp/en/index.html.

Production Calculator is a new online calculator that Vineland Research and Innovation Centre will roll out early this year. It will provide both cost and revenue expectations for okra and eggplant crops. Costs include everything from pre-planting through fertilizing and pest control to harvest. Revenues are forecast on pessimistic (low), expected (medium) and optimistic (high) yields. All estimates are based on real-life examples. **CG**

Go ahead. Paint a target on persistent wild oats and get rid of them for good with Axial herbicide. It targets the toughest grass weeds in your fields, especially wild oats, and eliminates them before they become a problem. When you're on a mission to help your spring wheat and barley reach its full potential, choose Axial® herbicide.

Axial®

syngenta®

For more information, visit SyngentaFarm.ca, contact our Customer Interaction Centre at 1-87-SYNGENTA (1-877-964-3682) or follow @SyngentaCanada on Twitter.

Watching for bears

Saskatchewan's Franck Groeneweg defends his farm against factors that prevent him changing as fast as he needs to

BY LEE HART / CG FIELD EDITOR

Franck Groeneweg is a young, progressive agribusinessman from central Saskatchewan, and like most of his neighbours, he accepts the fact the only constant in life and in farming is change. "There is always going to be change, and I try to embrace it," Groeneweg says. "I look at it and ask, what is the opportunity here? Something is different or changing, so how can I use this to my advantage?"

But Groeneweg was born on a family farm in France and then farmed and worked a few years in Iowa before coming to Saskatchewan in 1992.

And part of what he learned along the way is to watch for bears.

It's true that these bears aren't exactly your usual, four-legged bears. Rather, the 39-year-old admits, for him "bear" is a euphemism for the kinds of fears and hazards, real or perceived, that can get in between a farmer and the key decisions they need to make.

"I have always remembered what this older farmer in Iowa told me several years ago," says Groeneweg. "When you're young, you don't see any bears in the bushes. But as you get older, you start to see more, and perhaps one day there is a bear behind every bush."

Nor was that Iowa farmer talking about real bears. Instead, it was all about a way of thinking that he wanted to pass on to the young Groeneweg. Don't give in to your fears. Don't let them become bears. Take charge of them.

As Groeneweg talks, it's apparent that he has survived a couple of minor bear attacks, and that he is no worse off because of them. Probably he's even a little wiser after the encounters, and a fair bit better at farming.

The Groeneweggs also have a better sense of balance, as he and his wife Kari and their four young children look over their 7,500-acre operation, called Green Atlantic Farms, with a focus on opportunity, not a preoccupation with their fears.

But that doesn't mean there's nothing to guard against, and his experience with tile drainage makes an instructive, point-by-point case study of his overall management philosophy.

Big on Groeneweg's screen, after his dozen-plus years of farming in Western Canada, is the changing pattern of weather in central Saskatchewan. When they first bought land near Edgeley, about half an hour northeast of Regina, most growing seasons were generally considered dry.

"Then we had a wet growing season in 2009 and we figured, well, this is probably a one-year thing," says Groeneweg. "Then in 2010 it was wet again, and the same in 2011. And now it is 2016 and for the most part we've had more moisture the past six or seven seasons. I don't know if I am a climate change doubter, that may be another discussion, but I have to ask if this is a longer-term cycle. We could be dry next year, but then again we could see another 10 years of this."

After the first two or three higher moisture growing seasons, Groeneweg considered adapting to the change in weather patterns. He was familiar with tile drainage systems from his years in the Iowa corn belt. So in 2011 he bought a tile plow and put it to use.

Unlike parts of Eastern Canada and the U.S. where tile drainage is applied to the whole farm, Groeneweg considered it a water management tool he could apply to specific problem areas of his farm. "On a quarter section (160 acres), it is pretty typical here to have several low spots on the quarter — perhaps 30 to 40 acres — that hold water," he says. "These areas have the potential to be the most productive land. So our approach has been to use tile drainage to remove this standing water."

Groeneweg believes in the benefits of using tile drainage, but he is also very aware of the need to keep the bigger picture in mind. "I see this as proper water management," he says. "It is not like we are intending to drain land and send this big gush of water over to Manitoba. It is using a well-planned system on these problem areas where water is carried away in a trickle."

Tile drainage is new territory for Saskatchewan, so regulations need to be developed to accommodate the practice. And as a director of the Saskatchewan Farm Stewardship Association, one of Groeneweg's interests is to help guide the regulatory process.

"We can't secretly install these systems and hope no one finds out," says Groeneweg. "We shouldn't hide it. There is nothing wrong with proper water management. We need to understand the benefits and develop the appropriate regulations."

Really, there are only two options. The wet areas could be left to become weedy and perhaps saline. Or they can be managed to produce crops that use moisture.

He likens it to the evolution of conservation farming practices such as zero till and direct seeding over the past 25 years. In the early days there were people

PHOTOGRAPHY: MIKE RAINE

I also need to pay attention to what is happening in the rest of the world," Groeneweg says. "The crops may not be the same as I am growing here, but what can I learn from their experience?"

who believed in tillage and were reluctant to accept the concept of continuous cropping and direct seeding.

Many farmers actively opposed it, and it took time for that to change.

But, says Groeneweg, if Western Canada is into a higher moisture growing season cycle, new water management practices need to be considered. "If Phoenix started running into winters where they were consistently dealing with two-foot snowfalls, someone is eventually going to buy a snowplow," he says.

While the sometimes excessive moisture comes with its share of problems, Groeneweg also sees it as his responsibility as a farmer to look for ways to turn it into an opportunity.

"If we can do what we can to properly manage the water, we have potential to become very consistent producers of 70-bushel canola crops," he says. "If we make the best use of our resources — the moisture and most productive land — with proper management, then it becomes a win-win for producers as well as society."

CHANGE IS UNDERFOOT

Groeneweg also talks about the somewhat complex role of crop selection and rotation in adapting to change and managing risk on the farm.

A typical rotation on his farm has included spring wheat, durum, canola, flax and fababeans. He has tried growing grain corn, and hemp was fairly successful but it is a crop that struggles with marketing issues — he can grow it but the market isn't consistent.

"Just because you can grow something doesn't mean you should," says Groeneweg. "You have to be profitable."

Now, newer changes affecting rotation include increasing levels of herbicide-resistant wild oats (and concerns over herbicide resistance in general). Wild oats resistant to Group 1, 2 and Group 8 herbicides are common, and wild oat resistant to glyphosate could be around the corner, he says. "It is a warning we heard over the past several years and I'm as guilty as anyone else," he says. "But with herbicide-resistant wild oats, we weren't sure how to deal with it. And now it is a real problem."

Groeneweg says he is using newer tools such as Avadex and Edge (older chemistries that have found a new role in recent years) but that adds another $15 per acre roughly

CONTINUED ON PAGE 20

Interest grows in tile drainage

With a succession of wet growing seasons across Western Canada, tile drainage is moving to the front burner for more farmers, researchers and ag businesses.

It's hardly a stampede, but it's getting more thought after recent wet years.

One person fielding more questions is Joel Classen, an owner with Northern Plains Drainage based in Elie, Man., a company with its roots in specialty crops. "The biggest shift," Classen says, "is we are seeing more grain farmers asking about tile drainage."

Now, Classen is probably dealing with 15 to 20 new clients per year, mostly grain farmers, looking for equipment or systems to treat problem areas ranging from between 100 to 300 acres.

Interest also comes from higher land prices. It becomes a better option to invest in draining wet areas rather than looking to buy more land.

Avery Simundsson, a project leader with the Prairie Agriculture Machinery Institute (PAMI) in Portage la Prairie, Man., says interest in tile drainage is definitely on the rise. She points to a recent Manitoba farm conference where a tile drainage session was packed with producers looking to learn more.

One of her first projects with PAMI has been to do a literature review of tile drainage systems, and she, along with others, say one of the key issues with tile drainage may be to develop appropriate regulations."Once you start moving surface water around, everyone gets concerned," Simundsson says.

In Manitoba, for example, water and drainage issues are handled on a local municipality basis, so there can be a wide range of regulations. Specialists in Saskatchewan say there are no specific regulations for tile drainage, so any projects are reviewed on a case-by-case basis by the provincial government, but if interest in tillage drainage systems continues, it appears likely that all provincial jurisdictions will be looking to develop appropriate regulations.

Should he aggressively add acres? Should he look at farming elsewhere? For him, Groeneweg says, the key is to excel at managing change in the field while he works out his answers

to input costs, which racks up to about $100,000 bill on his farm. At the same time he tries to restrict his glyphosate to a pre-seeding burn-off.

With weed issues and a weakening wheat market, wheat is getting moved to the back burner of his rotation. Fababeans have a good fit since pulse markets are decent and it's a crop that can handle moisture fairly well.

Soybeans are another crop showing more potential in his area. He could grow more canola, but pushing that rotation has its consequences too with the potential for higher disease pressure. "Ideally you should be following a four-year rotation with canola, but we have cut that to three years," he says.

His plans are to include more pulse crops such as fababeans and peas in rotation and reduce wheat acres, and maintain flax and canola. "Herbicide-resistant weeds are a new challenge, a change, so how do you manage that and also consider proper agronomics, and at the same time consider you have to grow a crop you can market for a fair price to remain profitable — it can be a real juggling act."

Groeneweg says from a crop production standpoint his best risk management tool is to use good agronomic practices and pay attention to what is happening not only in Western Canada but other parts of the world.

"It is important to have good research locally, provincially and in Western Canada," he says. "I also need to pay attention to what is happening in the rest of the world… the crops may not be the same as I am growing here, but what can I learn from their experience?"

Groeneweg says his farm will always need to change. While their children are still quite young, he has to think whether they will be interested in farming. That opens a whole other box of questions. Should he expand the farm base near Edgeley, look at farmland in Alberta or Manitoba or some other part of the world?

Does he want to have a 20,000-acre land base? If yes, he knows it would come with its own set of challenges.

And the questions continue.

"And the advice varies too," Groeneweg says. "Some people say you shouldn't put all your eggs in one basket, while others say it's better just to have one basket, but watch it closely. So there is always something to think about."

"We can do the best job we can today and look at the opportunities that change provides. And as the next generation comes along we'll have to look at the options then." **CG**

I will be a trailblazer by recognizing opportunity and embracing the future. I will meet challenges head-on, adapt and overcome. I will continually challenge the status quo and place my trust where it is deserved.

InVigor®

CELEBRATING EST. 1997 20 years WITH INVIGOR

Bayer

cropscience.bayer.ca 1 888-283-6847 @Bayer4CropsCA

0-66-01/17-10707503-E

CUSTOM BUSINESS

Custom operators like Troy Monea are under pressure to boost customer service and to intensify their business management. In this game, there's less and less room for the uncommitted

BY JOHN GREIG / CG FIELD EDITOR

PHOTOGRAPHY: ANTHONY HOULE

The same stories get told over and over again. For instance, when Troy Monea was growing his busy custom farm business near Falun, Alta., he reached out to a potential competitor.

"They had got so big so fast, I didn't know how I could compete," Monea recalls. "I couldn't offer what he was offering, so I went over one day and said, 'This is what I've got. I'm not competition, but if you're into a bind or a breakdown let me know.'"

A few weeks later, that other custom operator did have a forage chopper break down, and Monea was able to step in to help. Today, they work back and forth regularly and keep in communication constantly.

It turns out custom operators are pretty good at sorting out who's serious about the business.

Similarly, about four hours south, when Sean Stanford started his custom spraying business four years ago, he too found that co-operation was more important than competition.

Stanford, who farms and custom sprays near Magrath, a half-hour south of Lethbridge, went to another established custom operator, about 30 km away, and looked for advice. "I told him my business plan," he says. "I told him I didn't want to compete with him, I wanted to run alongside him."

"I told him I would not undercut prices and would not out-advertise him," he adds, but it's clear the two had already seen enough of each other that day to make a decision, and they've made it work ever since.

"If I'm too busy I will send some work to him, and if he's too busy he'll send some to me," Stanford says. "We're not in a business relationship, but we have a good friendship."

Lurking behind it all, however, for both Stanford and Monea and for their partners, is the strategic recognition of just how vital great customer service has become for today's custom farming businesses.

The days when custom operators only had to be good with a wrench are long gone.

It's the same in southern Ontario, where Nick Lenos operates a custom farming operation near Villa Nova, a half hour south of Brantford with his brother Shawn and father John. Like Monea and Stanford, the Lenos family believes that in today's rapidly evolving agriculture, the successful custom operators will be the ones who really are dedicated to their customers.

For Lenos, it's the most important differentiator. "The customer takes precedence over your own land," says Lenos. "Other growers in the area do custom work as well, and their land comes first."

For those who want to be serious about the business, customer service means more than just showing up with the sprayer at the right time, although it does mean that too. Unlike farmers who manage their farms within boundaries they own and control, the custom operator has many people to please, and they also have to deal with the weather happening on the farms of all of their customers.

For Monea, as for the other operators in the article, success takes business discipline, and solid customer relations

But even this emphasis on customer relations has to be part of a larger package. It's also essential, for instance, for custom operators to hone their accounting and their HR management skills far beyond what's necessary on many farms.

All this means their daily decisions are filtered through the usual production lenses used by farmers (seeding and planting rates, fertilizer and spray details and rates, scouting, harvesting and logistics), plus their internal business demands, plus their focus on customer relations.

At Lenos Custom Farming, though, it starts with a clear focus. They aim to treat the land they work for other people as their own.

"If you see something in the field, you stop and pick it up. If there's a tree down you let the customer know. You try to keep up with what's happening in their fields," says Lenos.

"When a customer needs to get wheat in, we'll go past other fields so that we can get it in for them."

The Lenos operation works some of Ontario's most challenging soils in a 30-km radius of Villa Nova, covering much of Haldimand and Norfolk counties. Soil there can range from heavy clay to blow sand, which means in order to serve their customers, they maintain a large equipment inventory. That's an extra financial burden, but they try to supply complete crop production custom work, from tillage and planting to spraying and harvesting.

CONTINUED ON PAGE 24

Lenos Custom Farming started with John in the 1970s. At that point he was a dairy farmer, but also started offering some custom farming services, as he also enjoyed working with equipment. In the 40 years since, the business has grown significantly to include Shawn and Nick, as well as a full-time employee and two or three more seasonally.

BUILD ON COMMUNICATION

Having open communication with customers is important for the business to run well, says Lenos. That involves communications from the custom operator to the farmer and back. When weather is variable, finding the right field to work that day can help efficiency.

"It all stems back to communication," says Lenos. "You have to ensure you get the job done."

Monea requires three days notice for spraying at G&T Custom Harvesting. But if a rig is in the area and they can work it in, they will.

Monea finds that his customers still want to see him at some point during the day. Complaints about employees are lowered if the customers have had some interaction with him. They know he is still in charge.

Farming is different from industries like oil and gas, Monea says. There, a company president might have no direct contact with customers, and their role may be all about logistics and price. But that's not

going to cut it if you want to excel with a custom operation.

"If I'm not there with that relationship and trust that's been built from the beginning, it hurts me," Monea says. Even a half hour is enough, he says.

There are busy times in custom farming, and they often all come at once when a crop reaches a certain maturity at the same time in the same area, or when disease or insect pressures reach a threshold calling for treatment across broad acreage.

"It feels like we're busy for a month in the spring, then there's a lull and a week of bugs in canola and everybody wants it on the same day," says Stanford, of Twisted Iron Farming, in southern Alberta. "The sprayer can sit for two weeks, then we're going to 20 hours per day for three weeks to get caught up."

Being able to tell a farmer who wants their insecticide on now that they have to wait two days is tough. Long-term relationships and trust make it easier.

Telling them the truth is the key, says Monea. That might sound simple, but it has been part of his business growth.

"I know people who were upset about custom operators," he says. "They would ask when they would be coming, and the operators would say they'd be there tomorrow, instead of telling the truth, that they were backed up three to five days."

"One of biggest things that makes us successful — we will make sure we are on time. We will book a little less to make sure we get to them."

Custom farm operations tend to divide into two camps: farmers who spread their equipment costs over more land by doing some custom work, and those who are custom farm operators first.

Stanford at Twisted Iron Farming is in

CONTINUED ON PAGE 26

It's business. But is it still a farm?

BY JOHN GREIG

Are custom farm operations just farms by another name?

Not according to government and taxation rules, which may be something you don't discover until it's too late, and the government is classifying you as a custom operator business and no longer a farm.

Make sure you maintain your qualified farm property designation, say David Engdahl and Shea Ferster, accountants, business advisers and partners with MNP in Saskatoon.

"I can't stress how important it is to maintain that qualified farm property status," Engdahl says.

Custom farm businesses are treated like any other non-farm business. That means there can also be implications for succession planning. For example, shares in a farm corporation can be rolled over and gifted tax-free to children or grandchildren, which can't happen in other non-farming corporations.

Engdahl says the custom operators he works with separate their businesses, so that the farming that they do will be managed as a farm, with the tax advantages of a farm, and the custom farming business will be run separately.

A second major area of difference between farm business and custom farm operations is that farm businesses are taxed on a cash basis, while other businesses are taxed on accrual basis. That means, for instance, that farms can time a grain cheque for the best tax outcome.

In non-farm businesses, income is taxable after the work is performed.

Expenses can be the biggest challenge when the business is split between a farm and a custom business. Say a grain buggy tire goes while you are in one of your fields. The tire blew while doing work for the farm business, but most of its wear may have been while running the roads and fields for the custom farming business. How do you apportion the expense?

Another challenge is accounting for equipment. Custom farmers usually use acres to determine whether the machine is used more for their farm or custom work businesses.

However, other measures like hours may be necessary. Engdahl uses a bunk silage pack tractor as an example of a piece of equipment that runs for hours, but covers little acreage.

Other important factors include making sure you have the proper liability insurance coverage for running the roads and working other people's land as a custom operator. Farm insurance packages won't cover it. And in some provinces custom operators will qualify under workplace protection legislation, while farms may not, or may be under different levels of regulation.

the first category. He and his wife Amberley run about 400 acres, not enough for a full-time farming career. Stanford works during the off-season as a mechanic in Lethbridge, but devotes himself full-time to custom spraying and his own acreage during the crop production season.

About four years ago he learned the local Crop Production Services (CPS) outlet was getting out of custom spraying. "I saw an opportunity to jump in. We bought our own sprayer and then asked them to send people our way," he explains. Word of mouth advertising and relationship building also helped at the start.

He runs his Apache AS10-10 hard during the growing season, aiming to cover about 20,000 acres each year. Most of his customers are smaller, between 500 and 1,000 acres, but customers of that size value his service since they are unable to justify purchasing a high-clearance sprayer.

COMPLEX RECORD-KEEPING

Attention to detail is important for Stanford, and has to be for every custom sprayer, he says. Keeping track of the details requires dependable record-keeping systems.

In Stanford's case, his wife Amberley looks after the accounting for the farm and the spraying business, but Stanford has to be able to hand her a stack of accurate record sheets at the end of the day.

Customers then get field record sheets. "Everyone has a paper trail and my butt's covered," Stanford says. "Without someone to full-time keep up the books, I would be drowning in paperwork. Having someone who is computer savvy and keeping it up is a lifesaver."

The need for records is even more important now that so much data is created by cropping equipment, with data that needs to be shared with farmers.

In Monea's business, his wife Holly also manages the books for the large operation. She was a bank account manager until deciding to switch to the business full time, where her role is crucial to managing their growth. They are now looking at whether they need more office staff, including a dispatcher for the numerous pieces of equipment they have on the fields in central Alberta.

The backbone of Monea's custom farming business is silage harvesting, although the business has changed in the past 10 years as the number and size of feedlots and dairy farms has grown in his area.

Monea says he was running a round baler at 10 years old. "We were taught safety first and foremost. I was not unsupervised for very long." But it gave Monea a taste of the business that became his career. He had an early passion for farming, and remembers reading seed guides and keeping up on crop trial data at 12 years old.

The Monea's farm just under 5,000 acres, some owned, some rented, and look after seeding about 12,000 acres, including their own, and spray between 35,000 and 40,000 acres, including their own. They harvest custom silage for cereals and corn and also have a custom trucking business. They mostly haul grains, mainly canola to the Cargill crush plant in Camrose.

Troy bought out his father in 2002 and now is the sole owner and president of the company.

OUTSIDE HELP

Custom farm operators, like most farmers, have help they rely on outside of family. In Monea's case, that's 10 full-time employees, accountants and a supportive banking system.

Managing employees is one of his largest challenges, in part because with 10 employees, there is always some turnover.

"We are fortunate that we've had many people with us for many years but, still, the limitations come on the human side, not the equipment," says Monea.

Even in an area of Alberta where laid-off oil and gas workers are plentiful due to the downturn in the oil economy, it's still difficult to find people who want to work.

"There are two different classes of wages, two different ethics of work," he says. He finds some employees are all about the wage. Others are about doing meaningful work that they like.

Monea tries to go the extra mile, helping out his employees who farm. Some can borrow a truck to move grain. Others can borrow equipment.

One employee bought an air seeder and Monea put a tractor on it and gave him some customers. Now that employee has built up his own customers, which means Monea essentially created a competitor, but he has no problem with it.

Monea, by the way, says technology has greatly reduced employee error, including maps in sprayers and the shutoffs in the equipment."The risk of wrong application and mishaps is hugely downgraded with technology," he says.

TRUSTED SUPPLIER

Being a trusted supplier to a farm is even more important when commodity prices drop. That has made the past few years, with low grain prices and more recently, cattle and hog prices, a challenge. Most custom operators are also farmers, so they know where the pain is coming from for farmers.

"We are still charging the same rates we were four or five years ago... and I hate it," says Monea. He would like some of the increased efficiency of equipment to drive less cost to his customers, but those larger and more efficient machines have also doubled in price, especially for large self-propelled harvesters and combines.

Monea says the capacity increase has matched the price increase for harvesters, but the doubling of the price of combines is harder to take as the capacity has far from doubled.

"We haven't changed our prices since we started," says Stanford. "Fuel price is up 20 to 25 cents per litre since we started, but we've kept the billable price the same. We all know these are tough times."

Larger and more efficient equipment has helped the Lenos family, but they are keeping equipment a bit longer. They also do most of their own repairs in-house. "These are big costs but you can't push them onto the customer. You can't put combine rates up $5 every year."

Instead, you need to be the farmer's best partner and supply a service they can't match with the equipment they can afford to buy. In an era of growing precision advantages in farming, that's an argument that sells.

"The biggest thing is the relationship with your customer and knowing their needs," says Lenos. "You can work through a lot of good times and a lot of tough times when you understand their businesses." **CG**

Beyond the family

It takes smarts and determination to use your farm to help a new farmer get their start, but the rewards can be deeply satisfying

BY ANGELA LOVELL

Four years ago, Tom and Margaret Towers were facing a dilemma that's becoming increasingly common for farm couples as they move into what are politely called their senior years.

The Towers knew they couldn't continue to manage alone forever, and they also knew they wouldn't want to leave the farm near Red Deer, which they'd spent a lifetime creating.

And while their children love having a connection to the farm, they were away pursuing successful careers.

"Our kids are doing other things, but the land is important to them and we wanted to keep the land in the family," says Tom, who established Tamara Ranch in 1967 with his wife, Margaret, about a mile from his great grandfather's original homestead.

"We needed to find somebody who could manage the place," says Tom. "But it was important that they had the same philosophy as us."

It wasn't only the kids they were thinking about. Like others, they were thinking about themselves too, and about their lifetime's commitment to the land.

Surrounded by large-scale grain farms, the Towers figured that if they sold their land it would be swallowed up, becoming just another cluster of undifferentiated fields in a much larger crop production enterprise, and they couldn't bear to think that the things that made their land special might be lost, or that all the work they had put into building soil health, improving the grasslands, increasing biodiversity and retaining natural habitat might be undone.

"We love our land. We've been on it for 50 years," says Margaret. "But what were our options? We wanted to stay on the land, but we didn't know how to still make an income off the land without selling or renting it."

NEEDING LAND TO RELY ON

Meanwhile, not too many miles away, Blake and Angela Hall were struggling to find a long-term land rental agreement that was stable enough to allow them to grow their grass-fed beef business.

After a year of university, Blake was having a hard time finding the right direction for his life. He had spent a couple of years participating in youth volunteer exchange programs in Canada and Burkino Faso, and had set two goals for himself; to learn how to build a house, and to grow food. "I figured there was probably no harm in learning those two skills whether they led me into a career or not," says Blake. "I was 20 years old, and not tied down by family or debt."

Blake spent a summer in Ontario with the CRAFT (Collaborative Regional Alliance for Farmer Training) program that taught him about growing food, and decided to stay in Ontario to start a carpentry apprenticeship. He obtained his journeyman's certificate five years later, but it was that first summer on the farm that stirred a passion for agriculture.

When Blake moved back to Alberta in 2011 he bought his first small herd — 30 head of mixed pregnant cows and young steers. He also took a meat cutter's course at Olds College where he met his future wife, Angela, another "townie" with no farm experience, who Blake describes as his happy farming accomplice.

A FATEFUL MEETING

The Halls and Towers crossed paths in 2012 when Blake answered Tom's ad on Kijiji for grass-finish type cattle. When they got together, Tom and Margaret immediately sensed and liked Blake's outlook, even though he'd grown up in the city.

"We were really impressed with this young man, and we started chatting about what he wanted to do with these cattle, and what he wanted out of life," says Margaret. "We could see his love for the land and the passion for what he was doing. He wasn't just playing at farming, he was really serious."

PHOTOGRAPHY: WHITE CREEK RANCH PHOTOGRAPHY

The cattle were such good animals, Tom wondered why Blake was selling them, and when he answered that he needed to pay his winter feed bill, Tom and Margaret wanted to help. They purchased some of the female cattle and agreed to keep the calves to sell back to Blake.

From there it was a natural progression to ask Blake if he wanted to bring his herd to the ranch and manage it. "We could see that he needed some permanence, somewhere he could put his roots down, raise these animals and keep his business going," said Margaret.

Tom Towers, l, was looking to retire, but wanted to ensure their farm would live on. Blake Hall wanted to farm, but didn't have the equity. With the help of legal agreements, an outside facilitator, and a commitment to open communication, each is reaching their goal.

The Towers suggested a long-term plan to manage 400 acres of their land and also offered to let Blake and Angela move into the modular home on the next quarter on a rent-to-own basis.

THE AGREEMENTS

The Towers and Halls each sign a yearly Farm Services Agreement, which provides mutual protection for all parties and is an umbrella cover for all of the enterprises that operate independently on the ranch.

Tom and Margaret signed an additional five-year Scope of Work (SOW) agreement with Blake and Angela which covers the day-to-day activities that they share on the ranch. "This working agreement gives us the ability to bring Blake into the family operation, and allows him to become a part of it rather than a renter. We, in turn, have the confidence of a long-term relationship with the ability to mentor and impart what we have learned over the last 50-plus years," says Tom. "We share similar philosophies and can work toward shared goals for the overall progress and success of Tamara Ranch."

Importantly, the SOW provides Blake the opportunity to ranch with no fixed costs in land or mortgage payments.

Blake runs his cattle with the Towers cattle on 400 acres and pays them an animal day rate while they pay him a per-head day rate for looking after their cattle. This year, the grazing herd comprised 150 head of cows, calves, yearlings and fats, of which Blake owns about 60 per cent. They share costs for hay, straw, salt and mineral based on percentage of ownership of the herd.

"Blake buys our fat beef at a fixed hanging rate, and markets all the fats, including his own, through his company Prairie Gold Pastured Meats," says Tom. "He pays us a percentage of gross on lamb and pork sales."

The Towers custom graze a neighbour's yearling replacement heifers and breed them for him, for which they're paid on a per-head-per-day basis. They reimburse Blake for the management of them, which includes daily moves and health care. Tom and Margaret

CONTINUED ON PAGE 30

For Angela and Blake, just as for Tom and Margaret, success hinges on their openness and mutual respect. "We have all got to be financially sustainable," Tom says. "You need transparency."

still manage the remaining 640 acres which grazes cattle from a local Hutterite colony.

The Towers could just rent their land, but would lose the ability to sustain it in the manner they've worked towards for the 50 years they've owned it. "The simple rent from the farmable land would pay us about what we are getting from the cattle sales and grazing," says Tom.

HIRING A FACILITATOR

Even though Blake and Angela hit if off immediately with Tom and Margaret, they were still cautious about jumping in with both feet. "It's often the human element that leads to a breakdown in the partnership, whether it's family or not, so we really took our time to decide," says Blake, who ended up taking the same holistic management course that the Towers had taken in the '90s.

"I'd seen a lot of farms that were successful, their marriages were intact, they had good family lives, and their common thread was holistic management," Blake says.

Over that winter the two couples agreed it would be a good idea to hire a facilitator to help them with goal setting and to develop a strong communications strategy, something they knew would be important if their relationship was to grow and flourish.

They invited Kelly Sidoryk, a certified holistic management educator from Lloydminster to come and help them out.

Sidoryk's role was to help each couple set goals and create their own vision, which she then helped to bring together to form a larger vision that would work not only for the whole operation, but also for all the people involved.

"This is hard work (for them) to do," says Sidoryk. "It's harder than building fences or making a financial plan, because you really need to sit down, and be open and communicate your wishes."

"I really admire the Towers and the Halls for being able to create something unique," Sidoryk says.

Focusing on goal setting and communication at the start made it easier in the long run, Blake agrees. "That's when everything is good, and everybody is happy and excited."

"Inevitably things arise, and you can't set up a communication framework reactively," he adds. "As things come up, we've got the respect for each other, and the understanding that we can address those things, and it's been successful so far."

The communication strategy isn't anything fancy. It's as simple as sitting down together over coffee every Monday morning, talking about what's going on at the ranch, and sharing ideas to tweak the management, or discuss any small disagreements or grievances that arise.

Blake says he feels lucky to have such a good relationship with the Towers, because he's seen many of his peers from family farms whose succession planning hasn't gone anywhere nearly as smoothly, and he's fairly confident, having met the Towers' children, that he'll be able to work with the family for years to come.

Margaret and Tom had no doubt that their son Todd would hit it off with Blake, and vice versa, and they also knew that their desire to see the farm managed according to the ideals that Todd shares with them would hinge on their relationship.

"Todd has always loved the farm, and is totally in sync with what we have done here and the last thing he wants to see happen is the land pass out of the family," says Margaret. "Todd and Blake are developing a great relationship. They have a similar philosophy, and they truly respect each other."

Blake and Angela direct market grass-finished beef to private customers in Red Deer and Calgary under their own Prairie Gold Pastured Meats brand. "We have our animals butchered, and we deliver our beef directly to our consumers," says Blake. "There's no way that, as a small producer, we could have gotten a start in agriculture if we were trying to get into commodities. With direct marketing we keep our entire margin, and set our own price rather than take whatever price is being given at the auction mart."

AT THE BANK

As with many young producers starting out, it's difficult to walk into a bank manager's office and ask for an operating loan when you have little or no equity built up to back it. The Halls had to be creative to finance their operation. They run a herd share program — similar to a Community Shared Agriculture (CSA) arrangement, where customers purchase a share in the live animal that will provide their meat. This provides upfront revenue and a reasonably stable cash flow through the season.

"It is really the only way we were able to build the business," says Blake. "When I was starting I was literally laughed out of lenders' offices."

A FARM 'INCUBATOR'

Interestingly, Tom and Margaret's arrangement with Blake and Angela has morphed into a kind of "incubator" system which is helping other young people achieve their farming dreams too. They now also rent a

seven-acre plot of land to Blake's brother-in-law, Mike, who is running a successful CSA venture which employs up to five local people. They also have an agreement with another young couple, Sven and Nikki, who raise pastured poultry on their land in the summertime.

Tom and Margaret know what they are doing goes against the traditional retirement plan of selling off the land or re-mortgaging it to the next generation.

"We are trying to give the next generation of young farmers the opportunity to grow food, and it's amazing how many young people want to do that," says Margaret.

The model of bigger, bigger, bigger isn't able to draw those young people back, she says. "We believe in a re-generative model of agriculture that goes way beyond sustainable, which allows these young people to manage smaller plots of land without having to worry about a big debt hanging over their heads."

The bigger picture should also be kept in view, she adds. "They (Blake and Angela) are growing food for local customers, creating employment and keeping small, rural communities viable and strong."

BECOMING MENTORS

Through the process, of course, the Towers have had to accept change, they've had to get to know someone almost as well as they know their own son without having had a lifetime to spend with him doing that, and they've had to learn how to offer advice without smothering. "You have to mentor in a way that you allow the person to feel like they're not being controlled, that they have the ability to make their own decisions," Margaret says.

For an arrangement like theirs to work, there needs to be transparency, honesty, good communication, and flexibility, but you also need to change your mindset, Tom finds. "Farmers and ranchers have survived by being independent thinkers, but with a deal like this, you've got to change your thinking to interdependence."

You also have to be prepared to discuss some tough issues, he adds, and one of them is finances, which even many farm families dance around. "We've all got to be financially sustainable so we have a lot of those kinds of conversations. We have shared costs, and separate costs, and we have an understanding of what all of those are," Tom says. "You need transparency with finances."

Although Blake would love to own land one day, he accepts it's not likely to happen. "Land prices around Red Deer are so inflated beyond agricultural production value that I just can't see us being able to own this place without me taking a high paying job in town for the rest of my career and that defeats our whole purpose," he says.

Blake knows their relationship with Tom and Margaret is special and that it is because of them that he and Angela can pursue their goals of owning their own home and having financial autonomy while farming full time. But there's something in it for Tom and Margaret too, allowing their agricultural legacy to live on, and giving them a chance to retire as gracefully as they farmed. **CG**

BY GWEN PADDOCK / SENIOR DIRECTOR, AGRICULTURE, RBC

Follow the five per cent rule

Incremental changes can have a big impact on your operation

You may have heard the saying, "Take care of the small things and the big things take care of themselves." This is a great piece of advice for life in general, and it also very much applies in the context of running a farm business, where even small changes can have a big impact on output — and on revenue.

The five per cent rule is a philosophy that advocates making small logistical or logical changes to the operation, rather than big, sweeping modifications, and it can often result in a healthier bottom line.

Implementing this rule is easy, but it does require that farmers shift their perspective and adopt more of a management role, where they are working "on" the business rather than "in" the business.

HOLISTIC MANAGEMENT STRATEGY

Ideally, the process begins at the budgeting and strategic planning stage, when you are developing the big picture plan for the year ahead and modeling various scenarios. Saving money is certainly the goal, but a common mistake can be to immediately, or only, look at cutting back costs or spending, without first considering the longer-term negative impact.

It's the same way that buying cheaper fertilizer or reducing spraying may save you money now, but then reduce your profits at harvest. It's important to take an agronomic approach, look at your plans holistically, and consider how one change can have an impact on another.

Trimming five per cent of your expenses may seem like a lot as a total sum. If that sum was $50,000, finding that much in savings on one or two big line items such as fuel or inputs will be challenging. But by spreading that amount across all expense lines, including smaller ones, it's no longer such a daunting task. It can also be as simple as reframing the cost per acre to cost per bushel, considering input costs rather than just revenue, or incorporating new habits and ways of thinking.

By taking a close look at each expense line and considering various options or solutions, you'll find that you can usually make better use of your resources to save or even make more money.

SPENDING MONEY TO SAVE MONEY

Sometimes, spending a little more can help save you more. For example, if your overall plan is to adopt new technology, think about all the areas where you could adopt it throughout your operation, and its impact across the board. It may make sense to spend more on advanced seed that is pest resistant, because it will save you more on other inputs. Before making any decisions, ask yourself: Is this technology something that can help to reduce expenses on smaller line items? If I invest in this, what is the cost and what is the potential savings or return? Is the return sufficient to justify the investment and whatever risk is involved?

When applying the five per cent rule, make sure your overall financial management strategy is cohesive. Break down steps so that the process is not overwhelming, and start with these practical tips:

Write it down: Put to paper your goals for each quarter. For example, in the first quarter, finalize your budget. In the second quarter, analyze your repairs and maintenance. Take a course on futures puts and calls for your marketing strategy in the third quarter. And in the fourth quarter, you may want to meet with your accountant on ways to improve things for next year.

Do the numbers: Ensure your internal accounting system is on an accrual basis. Compare your actual results to your budget quarterly.

Prioritize: Make a list of what tasks need to get done to achieve your goals each quarter and identify what's really important, versus what just makes you busy.

CONTINUED EDUCATION

Sometimes, small changes can be more philosophical, but still have impact. Many farmers tend to do things a certain way simply because it's the way they learned to do it from their parents or even grandparents. It's important to continually challenge what you know rather than take for granted that it's just "how it's been done."

Look at processes and ask yourself if it's the most efficient or if there's a better way of doing it. Apply new thinking to your processes, such as looking at your financial results on an accrual basis rather than a cash basis. This will help you get a more accurate view of your farm business's profitability. Where cash income depends on the timing of inflows and outflows of cash, accrual accounting recognizes revenue when it is earned, regardless of when receipt of the cash from the sale occurs.

Continued education is another area where small changes can yield big results. Whether it's a formal course on futures and options, or whether it's workshops or simply networking with other farmers to gain new ideas or information, continued learning is critical to your farm's success. With so many advances in the industry and global competition, applying what you learn could make a big difference to your bottom line. If you're not keen on courses, hire a consultant or join with a few other farmers and consider sharing a team member who will focus on education and implement it for you.

As I mentioned in a previous article, peer groups are incredible resources and are becoming quite popular in the farming community. Utilize your network to learn from them, compare expenses or costs and identify areas where you can make improvements.

While it's easy to hope for success, hope is not a plan. Even small changes can help ensure your business is sustainable for the long term.

To learn more, visit www.rbcroyalbank.com/commercial/agriculture. **CG**

Gwen Paddock, senior director, agriculture at RBC is a specialist in agribusiness. Since earning her B.Sc. with a major in agriculture economics she has been working with agriculture clients. A farmer at heart, Paddock was raised on a beef cow-calf farm outside Guelph, Ont., and participated in 4-H and Junior Farmers. To find out more visit **www.rbcroyalbank.com/commercial/agriculture**

PG. 36 Jay Whetter reveals five research projects that are likely to revolutionize how we grow canola, and the yields we get.

PG. 38 When does it actually make sense to call in the grain commission for a ruling on grain grades?

Wheat breeding: Public or private?

Some argue private investment will boost yields, but others note that public breeders have done a pretty good job so far

BY ALLAN DAWSON

Making wheat a more competitive crop requires public and private breeder co-operation — and getting a return on investment from farmers buying seed.

That was the consensus among panelists discussing wheat breeding at the 3rd Canadian Wheat Symposium in November.

"My observation would be that ultimately farmers are going to be paying for this one way or another," Garth Patterson, executive director of the Western Grains Research Foundation (WGRF) said.

Farmers will pay if it makes sense, said Henry Van Ankum, a farmer from Almonte, Ont., and a director of the Grain Farmers of Ontario.

"The way I view it is you have to spend money to make money," Van Ankum said. "We've got to attract investment. Sometimes that investment needs a return... we're going to have to pay our share of it along the way."

Wheat quality manager Rhett Kaufmann speaking at the official opening of Bayer CropScience's wheat breeding centre near Saskatoon last summer. Bayer is investing $1.9 billion into wheat worldwide over 10 years, including $24 million in Canada.

PHOTO: LISA GUENTHER

DECLINING IMPORTANCE

Wheat is important. It's the most widely grown and traded crop globally, Patterson said. And it accounts for around eight per cent of Canadian farmers' cash receipts, or almost $3.8 billion a year, said Rob Graf, a winter wheat breeder with Agriculture and Agri-Food Canada based in Lethbridge, Alta.

But wheat's popularity is declining because farmers earn more from other crops.

This year western Canadian farmers harvested 21.9 million acres of wheat — the lowest in five years, Statistics Canada said in its November production report.

Farmers want private investment in wheat like in corn and soybeans, said Jim Anderson, a wheat breeder at the University of Minnesota.

"They are very pro-technology," he said. "But at the same time they want a very strong public sector. They want an alternative to the companies. The thing that I hear a lot of is, 'Jim, we don't want wheat to go the same way as soybean.'"

The same is heard among Canadian canola farmers.

Soybeans are pushing wheat out of rotations, said Marcus Weidler, head of seeds Canada for Bayer CropScience.

"There must be a reason why soybeans are more attractive," he said.

It's not just a lack of technology in wheat. Demand for corn and soybeans is growing for demographic and economic reasons, Patterson noted.

Wheat hasn't been genetically modified to resist herbicides or insect pests. But western Canadian wheat yield gains due to improved varieties, on average, increased 0.7 per cent a year between 1991 and 2012, Graf said. Those gains were "somewhat higher than the global average."

In 2016, 95 per cent of the Canada Western Red Spring wheat grown in the West were public varieties.

"From the standpoint of yield increases, largely from

CONTINUED ON PAGE 34

the public sector, I would say we have done a really good job," Graf said.

On-farm increases were double that, due to improved agronomy.

"Long-term, stable, well-funded programs have been an effective strategy (due to) WGRF funding," he said.

Most of it came from farmers through provincial wheat checkoffs.

There are the equivalent of 11 publicly funded wheat breeders in Canada and four with private companies — one breeder for about every two million acres of wheat.

"So I would say there is ample room for the private sector," Graf said.

"My question would be how long patience lasts in the private sector if there is no product?

Graf bred wheat for Saskatchewan Wheat Pool until it pulled out after several years.

BAYER BETTING ON RETURNS

Weidler didn't respond directly, but noted that five years ago Bayer decided to invest $1.9 billion into wheat over 10 years.

Bayer is investing $24 million in Canadian wheat development, including its breeding station at Pike Lake, Sask.

Public wheat breeding in Canada is pertinent, Graf said.

"Public-sector cultivars have been very popular and public sector wheat breeding activities are currently vital to the industry. I don't think anyone could say that we really could do without them."

Public wheats dominate the U.S. market too, Anderson said.

In Europe, however, it's the opposite, Weidler said. Public researchers focus on pre-breeding such as developing new breeding techniques and focusing on high-risk, longer-term targets, thereby supporting both the private sector on the breeding side but also supplying farmers with new innovations.

In Germany, major companies such as Bayer, Syngenta and Limagrain are working with the public sector through a body known as proWeizen to develop an efficient hybrid wheat breeding platform.

"It is the largest pre-competitive wheat project ever conducted in Germany," Weidler said.

Once developed through this model, the private companies will adopt advances and then compete, he said.

Public funding of five million euros is being matched by the companies.

"I think that is one solution to think about — how we can split the work between the private and public sector," Weidler said.

Wheat breeding in Australia went 100 per cent private after the introduction of end-point royalties paid by farmers, Weidler said. However, public researchers are spending the same amount of money just on pre-breeding as they did 10 years ago on pre-breeding and variety development.

> **"The thing that I hear a lot of is, 'Jim, we don't want wheat to go the same way as soybean.'"**
>
> *Jim Anderson, University of Minnesota*

MORE CO-ORDINATION NEEDED?

"I am getting a little bit nervous with how fragmented the situation is here in Canada," Weidler said later in an interview. "Everybody is trying to do a little bit, but there is very little co-ordination on what needs to be done. So I wonder how long can Canadian wheat be competitive in the global market."

Wheat agronomy, which has the potential to match yield increases from genetic improvements, also needs more investment, he added.

Farmers will ultimately decide if there's enough incentive for public and private wheat breeders to continue in Canada, Weidler said.

But it doesn't matter if the public doesn't accept the benefits of modern agriculture, Weidler said.

Anderson said private companies are getting more involved in wheat breeding in the U.S., by partnering with universities.

"The growers realize they have a pretty good deal with the public varieties because the seed is cheaper," he said.

What farmers pay through state wheat checkoffs is probably one-tenth of what they'd pay for wheats developed by private companies, he said.

"So they are getting a good bang for their buck I think."

Canadian farmers also want low seed costs, but also to attract company investment. It means balancing farmer and corporate interests.

Last year JRG Consulting Group, at the request of provincial wheat and barley commissions and associations, explored five options ranging from the status quo with more co-ordination, to a farmer-owned wheat development company.

The consultants prefer a model that would create a non-profit producer body called Wheat and Barley West.

It allows for economies of scale and a consolidated farmer voice accommodating larger and/or more focused strategic investments in variety development, the report said. It's less risky for farmers, than starting a farmer-owned seed company. It also puts farmers in position to gear up should the federal government, which currently produces and pays for most new cereal varieties, decides to cut back. **CG**

CAFA
CANADIAN ASSOCIATION OF FARM ADVISORS

The Canadian Association of Farm Advisors (CAFA) Inc. is a national, non-profit professional umbrella organization dedicated to assisting farm families and businesses by increasing the skills of farm advisors and consultants.

www.cafanet.com

Everyone you meet knows something you don't know

BY LIZ ROBERTSON, M.A.
CAFA EXECUTIVE DIRECTOR

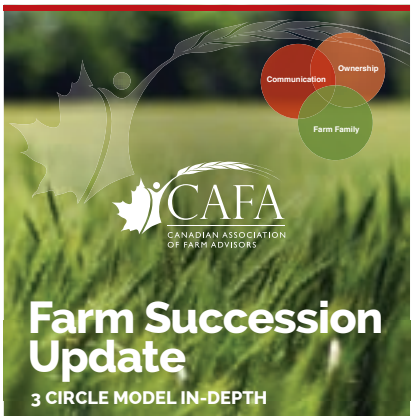
Opportunities are all around us!

How great is that? Everyone you meet knows something you don't know. Every time you meet someone you can learn something — from a stranger in a store lineup to your best friend — all know something you don't. Granted, they may know things that you don't care to know about but you never know where that next gold nugget of info is going to come from.

Anyone reading this magazine is likely doing so to learn something that someone else knows. Prior to the invention of the Gutenberg press in 1440 in Europe, access to information was by in large elusive to the masses. Now, access to information has reached beyond the overload level and we now need to sift through the 2.5 exabytes of data that are produced each day to find those nuggets that matter and make a difference.

To give you an idea of how much info is posted to the Internet in a day or in just 1,440 minutes:

- Over 500 million tweets;
- Four million hours of video posted to YouTube;
- 4.3 billion Facebook messages;
- Six billion Google searches; and
- Over 200 billion emails



Now, find that nugget that you need to help your business!

Fortunately, there is media, like *Country Guide*, to help identify those nuggets of information important enough to share with farm families and businesses. There are also a number of solid training programs in Canada for farmers including, among others, AMI's Advanced Farm Management Program, Farm Credit Canada's Ag Knowledge Exchange and Agri-food Management's CTEAM. There are also Farm Management Canada's Agriwebinars and countless blogs and resources created to help farmers be better at what they do.

Another great resource for learning and guidance are farm advisors: professionals with a technical expertise that they use to help farm families and businesses succeed — members of the Canadian Association of Farm Advisors (CAFA). Just as farmers realize the value in learning from someone else, so do farm advisors.

Most CAFA members are required by their self-regulatory or licensing body to maintain standards of ongoing skill development and through CAFA to further hone their expertise to better provide advice and guidance to Canada's farm families and businesses. In fact, CAFA is dedicated to increasing the skills and knowledge of farm advisors.

CAFA's Farm Update Series are outstanding professional development days for Canadian farm advisors. Series themes so far have been tax, succession and management, with more themes in development. This past year we have hosted Farm Succession Updates in Ontario, Manitoba, Saskatchewan and Alberta with another slated for March 23 in Ottawa — a first for farm advisors in Eastern Ontario! Additionally, two successful Farm Tax Updates also delivered via Agriwebinar across the country and a Farm Management Update last June with the next scheduled for June 8 in Woodstock, Ont.

These updates feature 12 CAFA farm advisors sharing their insight and expertise to the benefit of the advisors present and the industry as a whole — farm advisors learning from each other. The incredible networking that happens at the updates also enables that magical opportunity to learn from someone else you meet during the course of the day.

Everyone you meet knows something you don't know. Join CAFA at our Farm Update Series and find the nuggets that matter to you and your business.

For more information, contact CAFA or visit our website at www.cafanet.ca

CAFA MEMBERS ARE THE MOST VALUABLE AND TRUSTED FARM ADVISORS IN CANADA

March 23, 2017 Farm Succession Update, Ottawa. Finally, an information day in Eastern Ontario focusing on farm succession! Plenty of great insights and a unique networking opportunity. http://www.cafanet.ca

June 8: Woodstock, ON: CAFA's ever popular Farm Update. Details announced soon.

Toll free: 1-877-474-2871
Email: info@cafanet.com
PO Box 270 • Seven Sisters Falls, MB • R0E 1Y0

Follow us on Twitter @CAFANET

Real results from public canola research

Potential benefits include genetic resistance to sclerotinia and clubroot

BY JAY WHETTER / CANOLA COUNCIL OF CANADA

Publicly funded canola genetics research is producing results in Canada. I recently heard presentations from the following scientists and was impressed with the potential for each project to increase yield or lower input and management costs for Canadian canola farmers.

Clubroot resistance in Canadian canola varieties has relied almost entirely on one source, "Mendel." Fengqun Yu, research scientist with AAFC Saskatoon, led a project that identified many other clubroot-resistant (CR) genes, found genetic markers for them and then crossed some of them into B. napus lines that could be used for breeding.

A NEW WAY TO PRODUCE PURE SEED

Tim Sharbel, a molecular evolutionary biologist at the Global Institute for Food Security in Saskatoon, explores the potential for apomictic reproduction of canola. His work currently centres on Boechera, a wild canola cousin that can reproduce apomictically. Apomictic plants produce seeds without the need for pollen (male) fertilization. All offspring from an apomictic plant are genetic clones of the mother plant.

With apomixis in canola, breeders could produce single-generation hybrids and then lock them in genetically. It would simplify seed production, providing the opportunity to produce more genetically variable canola lines with ease, Sharbel says. "Seed companies could develop varieties that suit specific locations."

His team has transferred the "Apollo" gene into canola and expects first results this summer.

STARCH POWER

Michael Emes and Ian Tetlow, plant biologists at the University of Guelph, focus their research on how plants make starch. When Emes and Tetlow added a corn endosperm gene for a starch-branching enzyme (SBE) to Arabidopsis thaliana, replacing the plant's own genes for SBE, its biomass and seed production increased by three to four times.

A. thaliana is a relative of canola, and the two researchers look forward to trying this in canola.

"Editing out the naturally existing SBEs in canola (for example using CRISPR-Cas9 technology) and replacing them with the corn constructs may not have identical results as in A. thaliana, but there is potential for significant positive increase," Emes says.

Because corn will not cross naturally with A. thaliana or canola, this would be a transgenic trait.

FROM DIFFERENCES COME SOLUTIONS

A group of scientists from Agriculture and Agri-Food Canada (AAFC) in Saskatoon used a technique called nested association mapping (NAM) to select 50 Brassica napus "founder lines" for genetic research. These lines, chosen for their diversity, came from several locations around the world, bringing to the collection distinct differences in flowering time, oil and protein quality, glucosinolate content, seed quality and agronomic traits.

With the new ability to rapidly and cheaply map the genome, researchers can compare lines with differences in oil content or flowering time, for example, and then use genome scanning to identify the genes responsible.

"The NAM Consortium Project has huge collaborative potential," says Sally Vail, canola breeder and genetics researcher. It can feed lines back into projects on seed quality, new and emerging diseases, heat and drought tolerance, nitrogen uptake, pod shatter resistance, pest and pollinator interactions, and root and rhizosphere studies.

SCLEROTINIA STEM ROT RESISTANCE

Lone Buchwaldt, research scientist with AAFC Saskatoon, leads a project that will help canola breeders transfer sclerotinia resistance from B. napus germplasm to canola varieties.

Initially the team inoculated more than 400 lines with a single sclerotinia isolate and identified medium to high levels of resistance in material from Pakistan, South Korea, Japan, China and Europe. A subset of these lines was then checked for resistance to 17 sclerotinia isolates representing genetically distinct sclerotinia sub-populations on the Canadian Prairies.

One line from Pakistan, named PAK54, showed the highest level of resistance across isolates. This line was selected for transfer of sclerotinia resistance to canola-quality background by traditional crossing and backcrossing using one of AAFC's open-pollinated elite lines.

"Relatively fast progress has been made by selecting progenies using a combination of molecular markers and sclerotinia screening both in the greenhouse and field plots," Buchwaldt says. The first canola quality progenies with resistance equal to PAK54 were identified in the 2016 growing season.

Buchwaldt says open-pollinated canola lines with improved sclerotinia resistance will likely be available for licensing from AAFC at the end of the project in 2018. Seed of four sclerotinia-resistant lines are already available from AAFC to canola breeders interested in developing sclerotinia-resistant varieties themselves. Several companies have begun transferring sclerotinia resistance into hybrid varieties, Buchwaldt says.

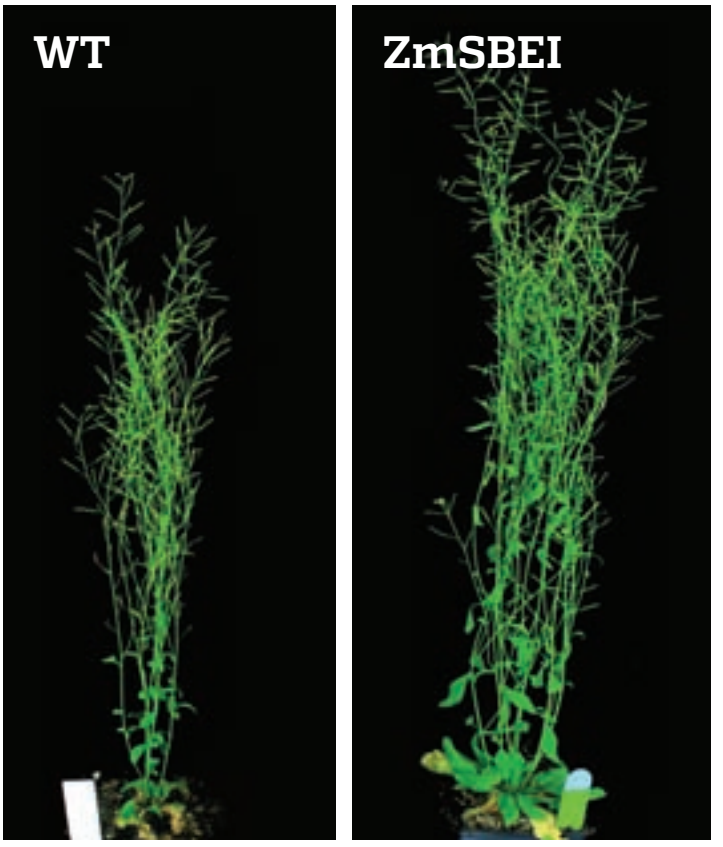
MORE CLUBROOT RESISTANCE GENES

Clubroot resistance in Canadian canola varieties relies almost entirely on one source, "Mendel." Fengqun Yu, research scientist with AAFC Saskatoon, led a project that identified many other clubroot-resistant (CR) genes, found genetic markers for them and then crossed some of them into B. napus lines that could be used for breeding.

Yu and her team screened 24 CR Brassica lines from around the world and grouped the type of resistance into 16 clusters. So far, they have mapped seven resistance genes: Five from B. rapa lines (one bok choy cultivar, one Chinese cabbage, one turnip and two canola breeding lines), one from a B. nigra line and one from B. oleracea cabbage.

They then "re-synthesized" B. napus canola lines to contain one or more of these genes. This re-synthesis will enable canola breeders to rapidly incorporate these new sources of clubroot resistance into their commercial hybrids.

Three B. napus lines containing four of these genes and markers tightly linked to seven clubroot resistance genes were distributed to canola seed companies in Canada in June 2016. **CG**



The wild type (WT) of Arabidopsis thaliana on the left has its own endogenous starch genes. The one on the right has the endogenous genes replaced with a corn starch-branching enzyme. The difference in biomass and podding is clear.

PHOTO: UNIVERSITY OF GUELPH

Jay Whetter is communications manager with the Canola Council of Canada. For more on canola research, reach the *Canola Digest Science Edition* magazines at **canoladigest.ca** and visit the Canola Research Hub at **research.canolacouncil.org**.

If you want to dispute a grade

If you don't like the grade at the elevator, you can appeal to the Grain Commission, but most farmers choose to shop around for the best deal

BY RICHARD KAMCHEN

It's their legal right under the Canada Grain Act — if farmers don't like the grade their elevator manager offers, they can appeal to the Canadian Grain Commission for an official ruling.

But not many do.

"In 35 years of buying grain, I've only had it once or twice with guys that I've dealt with," agrees Pro Com Marketing's Brian Wittal. "And I know over the last 12 years I've been advising producers on marketing, I haven't had anybody that's utilized that."

The overall numbers aren't much different. "The CGC does on average 204 'Subject to Inspector Grade and Dockage inspections' each year," says Daryl Beswitherick, the CGC's program manager of quality assurance standards and re-inspection.

Preferring to avoid rocking the boat with their elevator manager, farmers are much more likely to shop their grain around than officially appeal a decision.

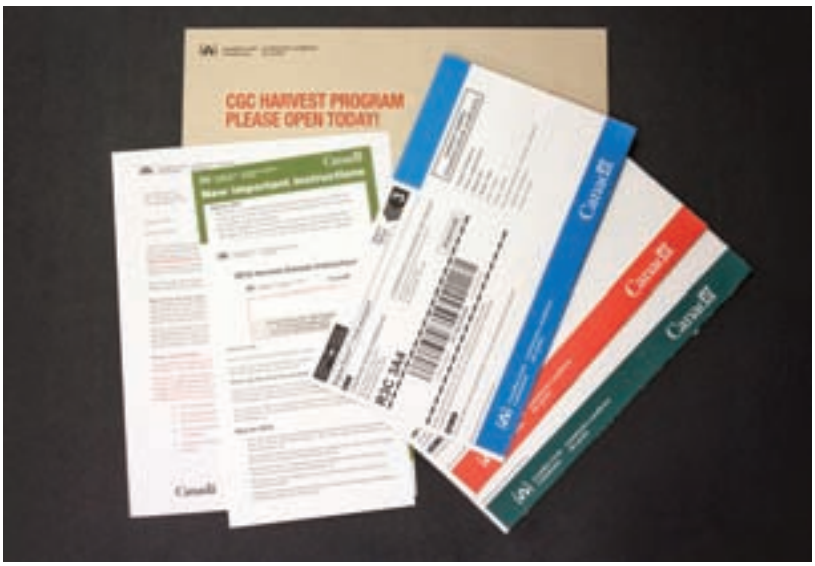
Farmers who visit CGC booths at ag shows typically understand they have a right to request re-inspection, but not all realize this right only exists at primary elevators, notes CGC community relations officer John Sawicz.

"As well, it's not always understood they can challenge moisture and dockage, despite the fact they are well aware they can challenge grade and protein," says Sawicz.

THE PROCEDURE

Anyone who disagrees with the assessment of grade, dockage, moisture or protein at a licensed primary elevator can ask that a sample be sent to the CGC for a binding decision.

The CGC says producers should state at the time of their delivery that they disagree with the grade or quality factors assessed, and ask the operator to send a representative sample of their grain to the CGC for an inspection subject to inspector's grade and dockage.



Few producers use the Canadian Grain Commission's procedures for appealing a grade at the elevator, but 8,000 to 10,000 a year use the free Harvest Sample Program to determine their grade before shopping their grain to different buyers.

Both the farmer and elevator operator need to agree that the sample is representative of the farmer's entire load.

A farmer who disagrees with the CGC inspector's results can appeal again, asking the CGC to send the sample for inspection to the chief grain inspector for Canada. That decision will be final and binding.

A full description of the resolution process can be found on the CGC's website under "services."

MAINTAINING GOOD RELATIONS

Beswitherick says the program usually comes into play when the farmer receives a different grade than he and the elevator had initially agreed to.

"Sometimes that's just based on it's a different sample; once you've taken a pail full of what you keep, once you start delivering truckloads, the grain can start to change. It depends. Every situation is different," Beswitherick says.

The program isn't much used, and Beswitherick hears from producers that they're concerned about keeping a good relationship with their elevator.

"A lot of times I do believe producers will work out the issue with their elevator to come up with an agreement that satisfies both parties. They want to maintain good working relationships. But it is there as protection and insurance for producers if they do run into problems," Beswitherick says.

"They don't like ticking off the elevator guys," agrees Wittal.

He says elevator managers might be apprehensive about continuing to deal with farmers who've used the appeal process in the past."

Wittal adds that elevators might also try to discourage farmers from appealing to the CGC.

"The biggest thing is, a lot of times, the elevator tells him, 'If you have a problem, you've got to let us know before we put it in our bin… if we send in a sample and then it comes back, if as the elevator company we don't like or agree with it, or we don't want to take that risk of having to buy it at that grade, we can't give the grain back to you because we've comingled it,'" Wittal says. "As soon as they have that conversation, then the farmer says, 'to hell with it, forget about it.'"

CONTINUED ON PAGE 40

How to take a representative sample from trucks and bins

You'll need:

- Four identical pails that hold a minimum of 20 litres. Label two with an "A" and two with a "B."
- A grain scoop or sampling ladle
- Sealable sample containers

As the grain leaves the truck or the bin, use the grain scoop to take samples at consistent and regular intervals to ensure the sample is representative. Remember, the larger the auger or the smaller the load of grain, the shorter the interval.

Alternate between the sides and centre of the grain stream and place all samples for each truck or bin in pail "A" until it is at least three-quarters full.

Once the grain is finished unloading, mix the contents of pail A thoroughly by hand. Place the two empty pails labelled B, side-by-side and touching on a level surface. Pour the contents of pail "A" at the point where the pails touch, ensuring that each pail receives about half the sample. Now empty one pail "B" into pail "A". Pour the contents of the remaining pail "B" back into the bin. (You have now divided the sample in half.) Repeat this process with the remaining sample until you have about two kilograms of sample left. Place the final sample into the remaining pail "A".

Repeat the procedure for each truckload that is going into the same bin, or for each bin being sampled. When the bin is full or the truck is unloaded, thoroughly mix the contents of pail "A" by hand. For a full illustration of the procedure, visit the Canadian Grain Commission website and search for "divide and reduce."

Place the final sample or samples in sealed containers and label each container to show the bin or bins they represent.

To prepare a composite sample from multiple bins:

Select a single sample that represents each bin and combine them in a pail. Mix the sample thoroughly and reduce it as outlined above.

Source: Canadian Grain Commission

SHOPPING AROUND

Producers are much more likely to take their samples to several elevators.

Ag-Chieve analyst Frank Letkeman says that in his 30-plus years on the elevator side of the grain industry, farmers don't just easily accept grades they're given.

"They will shop their grain around. It's not like they're just going to take the first offer that comes around, whether it's a fair one or not."

He says farmers are willing to drive the extra miles, especially if it means picking up a higher grade.

"I would say 95 per cent of the grain that was produced on our farm once went to our local wheat pool elevator, but now, in the new environment, we sell to four or five different buyers," says Saskatchewan Wheat Development Commission chair Bill Gehl.

Letkeman says that with the demise of the Canadian Wheat Board monopoly, there's more shopping around, even though there are fewer elevators farther apart on the Prairies.

"There's lots of freedom in the system right now, and that bodes well to the farmer getting a good deal."

WET YEAR PREMIUMS

Wittal adds that some farmers may also wish to avoid the risk of receiving a CGC grade that's lower than the one the elevator offered.

In a wet year like this one where grade and quality could vary widely, grain marketing consultants are urging their clients to widen the scope of elevators with whom they deal.

This year in particular, a farmer could receive a better grade from the elevator than what the CGC would offer in an appeal, getting his No. 3 bought as No. 2 because of, say, high protein.

"On red spring wheat, it may have really good protein and they can use that protein to blend off, so they may over-grade you just to make sure that they get that grain," explains Letkeman. "The different quality aspects of an individual sample may have value beyond the grade."

Phoning around different elevators to learn what they're looking for can really pay off this year. It helps confirm that what looks like a good deal really is a good one, as a farmer could receive a lower grade at a different location but a better price.

The CGC's Daryl Beswitherick says there is only an average of 204 "Subject to Inspector Grade and Dockage inspections" each year.

HARVEST SAMPLE PROGRAM

And to best prepare for negotiating with the elevators, consultants encourage producers to use the CGC's Harvest Sample Program.

"It's free, you just send all your samples in, and they'll send you back an unofficial grade and dockage on your grains, and that gives you somewhat of an idea of what the quality of your grain is, so that when you go and talk to the elevators, you can see who's going to give you the best deal for what you have based on your protein, moisture, etc.," says Wittal.

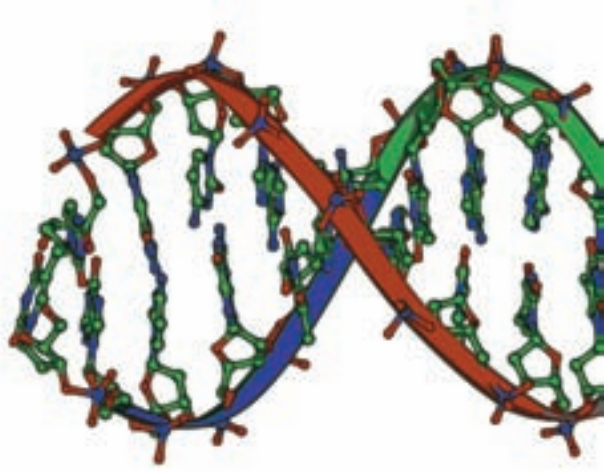
CGC's Beswitherick says the Harvest Sample Program is far more heavily used than the appeal, to the tune of roughly 8,000 to 10,000 samples a year. And a more challenging year like this one typically results in even more samples.

"It's really important to have a very solid understanding of what you actually have and then maximize your ability to get as much as you can for what you produce," says Gehl. **CG**

Still sifting through genes, but...

Plant breeding has always been about testing to see how one gene interacts with another, but today it can be done much more quickly

BY GORD LEATHERS



A rendering of the "double helix" structure of DNA discovered by Watson and Crick in 1953. Plant breeders can now isolate strands of the structure and identify which contain desirable characteristics.

Today's new generation of plant breeders are often called "gene jockeys," although they're actually more like cowboys rounding up "genotypes" into a common corral called a "genome." Then they look for other genomes to add to the corral so they can improve the herd.

Previous generations of plant breeders did the same thing, but they relied more on trial and error. Today's breeders know much more about the workings of the genes, how they affect each other and how they affect the performance of the plant. They've gone beyond genetics and into the realm of genomics.

"The genomic technologies that are coming online are quite exciting," says University of Saskatchewan wheat breeder Curtis Pozniak. "It's giving us an endless supply of new DNA markers that we can use to tag important genes and then follow those within the breeding program."

Farmers were the first plant breeders and have have been selecting and reseeding the best plants for thousands of years. Charles Darwin observed how the traits of the parents shaped their offspring, but couldn't explain how it happened. Then, 30 years after Darwin published *The Origin of Species*, England's John Garton became perhaps the first commercial plant breeder, showing that many crops were self-pollinating, and inventing the process of crossbreeding. The Garton Brothers' seed company released Abundance Oat, their first commercial variety, in 1892.

John Garton is credited as the first scientist to show that the common grain crops and many other plants are self-fertilizing. He also invented the process of multiple cross-fertilization of crop plants.

Then, two generations later, Crick and Watson described the structure of DNA in 1953, and we began to learn the mechanics of plant breeding.

PRECISION TOOLS

"Now there are tools that help you make better and more efficient crosses so you can focus your resources or impose selection earlier, based on lab data," explains Rob Duncan, a canola breeder at the University of Manitoba.

Old-school breeding meant making controlled crosses of several sets of parents, observing the agronomics as the progeny grew in plots, analyzing the seeds produced and then discarding the huge numbers of failures. Now Duncan can look for certain genes or groups of genes in the lab and make his first round of decisions based on what he finds there. He doesn't need to go to the field, which was essentially using "visual phenotyping" to see if the genes were likely there. Today, molecular tools prove they are.

One of these tools is the SNP chip (called the snip chip) — a glass or silicon chip with thousands of tiny portals. Each portal has a strand of synthetically produced DNA, not the full helix that you see in the pictures. When breeders want to know what genes are in the parent plants, they tease out the DNA, dissolve it into a solution and drop it onto the SNP chip. The strands of DNA from the plant seek out and bond to the compatible strands permanently etched into the chip.

Now they have DNA that can be analyzed for "marker genes" with desired characteristics.

"Over the last number of years we've developed the 60 k brassica SNP chip and that's 60,000 markers on one chip," Duncan says. "Now we can select for thousands of markers across the whole genome of whatever cross you're talking about and select the best combination on a genome-wide basis."

That means that instead of painstakingly making thousands of crosses and observing the result, breeders in the lab can narrow their search to a few likely combinations.

"It's not going to be accurate every time but it allows you to focus your resources," says Duncan. "Rather than taking all of them to the field to evaluate them, you can do it in a more efficient manner in the lab."

> **"Now there are tools that help you make better and more efficient crosses so you can focus your resources or impose selection earlier based on lab data."**
>
> *— Rob Duncan, University of Manitoba*

STILL THE FINAL TEST

However, the field trial is still the last word on breed evaluation. Even though the understanding of genetics and genomics is as good as it's ever been, the test plot is where the plant encounters the real world.

"Linking the genetic differences between cultivars and breeding lines to actual phenotypes is the next frontier," Pozniak says. "We need to take to take full advantage of the genomic technology and using genomic tools really revolves around using marker-assisted selection."

The marker provides a general idea of where the gene is located. If breeders understand that certain genes, or combinations of genes, give a plant characteristics such as rust resistance, then they know to look for those markers in the parent plant's genome.

Breeders are now finding some traits are actually influenced by combinations of genes found in different locations throughout the genome. To make things more complicated, many crop plants have multiple sets of chromosomes. Bread wheat, for example has six.

As in so many other applications, computers can ease the job of sifting through data.

"The cost of high-throughput genotyping and phenotyping is going to improve and these tools are going to become more efficient and more cost effective and efficient," Duncan says. "It's going to provide the breeder with quicker, better, cheaper information to predict some of those best parental combinations. Our ability to use gene editing where we have a more controlled ability to edit or modify genomes is going to improve as well as our ability to evaluate how those genes are actually expressed."

But the ultimate test is still in real soil under real weather conditions.

"So there's still a lot of boots in the field in plant breeding and I don't think that will ever go away," Pozniak says. "Plant breeding is really about sifting through the massive numbers of individuals that we need to look at to identify the vast gene combinations. The technologies we're using are really about helping us sift through those numbers more efficiently." **CG**

Krone wants you to buy

Is this the right time for offshore brands to make a play for a bigger chunk of the North American equipment market? Is it even possible for them to get onto your farm?

BY SCOTT GARVEY / CG MACHINERY EDITOR

As he stood in front of a group of more than 100 farm journalists from a wide range of countries, Bernard Krone, president of Krone, a family-owned forage equipment brand based in Germany, wanted us to know why his company had partnered with Lemken, another German manufacturer, to hold an international media event in northern Hungary.

The main reason was simple: both brands wanted to get reporters from across the world into a field to actually see their new equipment at work.

As part of his presentation to reporters at that event last summer, Krone discussed how his firm has navigated the downturn in the global machinery market. In its 2014-15 fiscal year, Krone's revenue from its agricultural equipment division was around 540 million euros (about C$768 million). Krone said he expected their final 2015-16 numbers to be only slightly lower, meaning the brand was making it through the depressed markets relatively well.

"With only a single-digit decline in sales, we are doing much better than the industry in general," Krone said.

But staying out in front of the pack means paying a lot of attention to markets that have big potential for sales. Like many other equipment manufacturers in Germany, a large percentage of annual sales come from exports. For Krone, that number is roughly 70 per cent, and the bulk of those sales come from North America.

No surprise, then, that I was one of three Canadian ag journalists invited to that field day.

Krone made it clear his brand — like a few others — hopes to grow its presence in the North American equipment market. To help do that, the company is moving its U.S.-based headquarters from Memphis, Tennessee, to a more central location in Shelbyville, Indiana. It's a move Krone says will help it better serve the continental market. At a cost of US$12.5 million, the new site should be operational by the end of the year.

What exactly does the North American market offer to brands like Krone that are in the forage equipment business? A summary provided by the company's director of sales and marketing, Martin Eying, who also spoke during the Hungarian event, reveals its potential. Of the

CONTINUED ON PAGE 46

An international assemblage of reporters clambers to see the Premos 5000 in-field pelleter in action during Krone's field day in Hungary in June.

PHOTO: SCOTT GARVEY

Raxil®

It's hard to imagine that one small seed could hold so much promise, but it does. And when you consider the importance of having a successful season, a cereal seed treatment you can depend on makes a huge difference to the success of your family business.

With the full support of Raxil® seed treatments you'll receive first-class disease control and a faster, stronger emergence that helps your field realize its full potential. Raxil lays the groundwork for a field that your neighbours will envy and that will ultimately help you achieve a superior performance.

Because from seeding to harvest, every seed counts.

Bayer

cropscience.bayer.ca/RaxilPROShield **1 888-283-6847** **@Bayer4CropsCA**

Bayer SeedGrowth™

C-55-10/16-10594654-E

Germany-based forage equipment manufacturer Krone held a joint field day this summer along with partner company Lemken outside of a small village in northern Hungary.

PHOTO: YVON THERIEN

roughly 30,000 round balers sold globally each year, he explained, about half of them are bought by North American farmers.

Eying also pointed out that the number of manufacturers in China looking to muscle their way into the round and square baler production has increased significantly and is continuing to grow. So European brands like Krone may be feeling a sense of urgency to beat those upstarts to the North American pie.

But pushing aside already established and well-entrenched brands like New Holland and John Deere that currently dominate the forage equipment market in Canada and the U.S. will be no easy task. And it can't be done by sitting on your hands. To try and give itself an edge, Krone has continued to pour a lot of investment dollars into R&D and infrastructure, despite the sluggish equipment market.

"During the period 2010 to 2013, we invested around 50 million euros (about C$70.8 million) in new buildings, new production lines and new technology," said Krone.

One of those new technologies is the company's Premos 5000 in-field pelleter, which could take forage harvesting in an entirely new direction, although it's unlikely the Premos will have a big impact on the market on this side of the Atlantic in the near future. But it does exemplify the kind of out-of-the-box thinking the firm is throwing into R&D

Astonishingly, the engineering team that created the Premos 5000 had an average age of only 27. Those young guns have proven they aren't just looking at forage equipment from a me-too perspective.

"With our Premos 5000 harvester that was introduced at Agritechnica, we once again demonstrated there are new directions where we can go," Krone continued. "You may rest assured that Krone will be good for a surprise or two in the future."

Of course, having enough R&D funding to allow engineers to spend time on creative projects depends on strong sales revenue. Yet Krone thinks that kind of funding will continue to be there, despite the downturn in global equipment sales.

"The agricultural machinery industry is going through tough times at the moment," he acknowledged. "But, this was the case before. To that extent we are positive about the future. The market will recover. We expect this process to occur around mid- to late 2017. Thereafter, we foresee farmers and contractors beginning to catch up on investments they've been postponing. That's our expectation based on experience."

A November report from CEMA, the organization representing ag equipment manufacturers in Europe, doesn't paint a very optimistic picture of the market potential for most of 2017. But it agrees, Krone may be right.

"In line with expectations, 2016 demand for farm machinery in Europe is set to end up with a drop," it reads. "Even though the expectations for 2017 are not very positive, the CEMA Business Barometer is slowly recovering from its record low level. This might be a sign that further positive market developments could occur later in 2017."

Quoted in the Association of Equip-

ment Manufacturers' November market analysis report, AEM's Benjamin Duyck, director of market intelligence, provided some insight into the market on this side of the globe from the perspective of U.S.-based brands.

"The ag equipment industry continues to suffer from a global ag downturn in large part due to low commodity prices," he said. "While some countries might benefit from their higher commodity production levels, the U.S. manufacturers are watching from the sidelines as a strong dollar is making them less competitive in the global marketplace. Of course, the strong currency is a problem that plagues all U.S. exports."

If currency exchange remains as it is, that could bode well for European firms like Krone whose production is based outside the U.S.

"Our expectations for the fourth quarter remain subdued as the U.S. dollar is experiencing its longest rally in 16 years," Duyck went on. "With the global economic malaise, the slowdown in emerging markets and the negative interest rates seen in several economies' bond markets, investment is flowing to the U.S. and U.S. stocks, driving up demand for our dollar, inadvertently affecting our competitiveness abroad."

So, U.S. equipment exports are suffering, especially those bound for Canada which is the U.S.'s largest ag equipment export customer. U.S. imports here fell by 15 percent between January and September 2016, compared to 2015. That represents a loss of U.S.$1.5 billion in real sales.

Despite the relatively pessimistic view many in the industry have of the global equipment market in the near term, there are likely many good days ahead. And all factors considered, particularly with currency exchange rates as they are, it may be the ideal time for Krone — and other firms headquartered outside the U.S. — to try and grow their share of the overall North American market.

"After every crisis, business starts to pick up again," Krone told reporters, summing up his expectations for future equipment sales. "Or as the Americans say, 'No farmer. No food. No future.'"

But…

Since Krone made that statement in June and equipment associations offered their year-end predictions, one very large fly has landed in the ointment of global trade. That's Donald Trump.

The new U.S. president is pandering to — and arguably further inciting — long-standing protectionist sentiment within the U.S., promising to demand changes to or withdraw from any number of existing and pending trade agreements. Foreign equipment companies wanting to make inroads into U.S. markets could face new and unexpected barriers. His stated intentions also threaten to disrupt global supply chains across all industries.

With a very unpredictable administration in the White House, will investments like Krone's head office move be money well spent or just wasted? When it comes to doing business in the U.S. — or anywhere else for that matter — the future has, to say the least, become unclear. **CG**

The new employee

Are your HR skills holding your farm back?

BY LISA GUENTHER / CG FIELD EDITOR

Farms keep getting bigger and more complex. But at the same time, farm families keep getting smaller, with farming couples having fewer kids, just like other Canadians.

On many farms, this collision of demographic and economic trends means the days of running the farm by putting the family to work are gone.

You can't even hire the kids down the road. They aren't there any more.

Leah Knibbs would know. She owns a human resources consulting firm (Kn/a HR Consulting), and is a partner in a recruiting firm (Kn/a Sourcing People), so she hears about labour issues from the people most directly impacted — the farmers.

She started her human resources practice while living on the farm in Saskatchewan. After 25 years, she moved from the farm into Weyburn, where her company serves agribusiness clients, including primary producers.

With less local supply, more farmers are having to pull in employees from other industries, Knibbs says, which can be where the challenge starts.

From the farm perspective, that's because those new employees don't understand agriculture. But from the employees' perspective, it can be because the farmers aren't on the same wavelength about core job issues.

Then, those misunderstandings boil up because new employees who don't have a farm background may not realize how long the hours can be, or how physically hard the work is, says Tracy Biernacki-Dusza, a project manager with the Canadian Agricultural Human Resource Council (CAHRC).

To a degree, however, it doesn't help to think about it in terms of who is right and who is wrong (which may be the first inclination for farmers who have worked and done chores all their lives). After all, you still need employees, right?

So how do you know whether you need to brush up your HR chops? And should you try to learn how to manage your employees yourself, or hire someone to manage your HR for you?

THE EVOLUTION OF HR ON THE FARM

"People say to me, 'I don't do HR.' Well, did you hire someone? Are you paying them?" Biernacki-Dusza chuckles. If you answer yes, she says, HR is part of your job desciption. It's something you're accountable for, and it's something that, for the sake of the farm, you need to do well.

Knibbs compares it to accounting, and how that has evolved as the nature of farming has changed. "Accounting used to look like a shoebox to the accountant," says Knibbs. Then farm journals came in, followed by more complex record-keeping and analysis, so today's farmers have more sophisticated systems.

The thing is, however, that while farmers may never have enjoyed doing book work, they went through this accounting revolution because they began to see the returns that it produces. And the more they understood what their accountants were talking about, the more they were motivated to make accounting a core — and enjoyable — part of their farm management.

Now, the same thing is happening with HR on the farm.

But is your farm still at the shoe-box stage of HR practice? And if it is, what's the best way to begin your own evolution?

The first step is to recognize that major transformations are underway as farmers look for better ways to lead their people.

Over the last year, for instance, Biernacki-Dusza oversaw the creation of National Occupational Standards for 11 commodities, including beef and crop production.

CONTINUED ON PAGE 50

"Employees can become family friends, Knibbs knows. "But I've seen that camaderie get in the way of good business."

THREE RED FLAGS

Is it time to call in an HR consultant to boost your farm's performance?

The first warning sign seems like it should be an obvious one. But it isn't always that simple. This red flag is a farm that can't keep staff.

The trouble is, it's easy to blame the employees, instead of taking a hard look at whether the problem is closer to home, says Leah Knibbs of consulting firm Kn/a HR Consulting in Weyburn, Sask.

The easy thing is to complain that employees don't have a work ethic. "But what if it happens multiple times?" Knibbs asks. "If you can't keep staff, the common denominator is you."

Another red flag is when you are losing sleep over someone's performance or attitude, whether it's a family or non-family employee.

"You've got something in your belly that's working on you," says Knibbs. Typically, she says, it means you're seeing problems with an employee's performance, but you don't know how to address it.

The third flag is when you find yourself wondering if you are meeting employment standards set out by law, and you're not exactly sure how to find answers to your questions about how your are compensating your staff, how you are handling their health and safety, or the conditions of their employment.

If you do have red flag issues on your farm, the first step is to put your issues into perspective.

You aren't the only one to have questions, Knibbs says. The HR environment is changing, both in terms of employee expectations and in terms of the rules and regulations, and rural employers of all kinds are finding it can be a challenge to keep up.

Farmers facing HR issues should remember that they've overcome new problems already. Knibbs compares it to a time on her own farm when wheat midge first started chewing through southern Saskatchewan crops. Her husband was losing sleep over this new problem.

"So what does he do? He calls somebody who knows about this stuff, and then he increased his capacity," Knibbs says. "And dealing with wheat midge just became a regular thing."

GETTING HELP

The good news for farmers is that there are resources to help them become better managers.

For instance, Tracy Biernacki-Dusza, project manager with the Canadian Agricultural Human Resource Council (CAHRC), says her organization is revamping their website and the AgriSkills HR Toolkit so they're in plain English to make it easier for farmers unfamiliar with human resources jargon.

The revised toolkit will help farmers identify and manage their HR problems. The toolkit can be obtained by clicking on the toolkit tab at the council's site, www.cahrc-ccrha.ca.

NATIONAL JOB BOARD

The council has also created a national agriculture job board at retail.agrijobmatch.ca. Farmers can pull in and customize the job descriptions that CAHRC recently completed, and they can also post job ads.

As well, the site provides an interview guide, and once employees have been hired, the site's job descriptions can help farmers design training for a new employee.

Meanwhile, Knibbs and her colleagues are developing an HR boot camp that will include four modules. "It's not going to make you an HR expert, but you're going to be at least aware and have some of the basic skills."

ON THE FARM

Working with an HR expert can help as well, Knibbs says. For example, hiring an expert to develop an employee manual means that it will likely include good practices and be current. And a good HR consultant will make sure the farmer knows more by the end of the process.

Creative farmers could also create their own HR support groups, similar to other peer groups focused on things like benchmarking costs. The group could invite speakers, Knibbs says.

CAHRC is also developing resources to help farmers train employees. The online courses will cover the reasons behind the jobs that need to get done on the farm, Biernacki-Dusza says. The aim is to give employees the why, then allow the producer to show employees how to do it, she adds.

Knibbs is confident farmers can up their HR game. They're smart people, she says. Plus they've done it in other areas already.

Says Knibbs: "If they looked at HR in the same way that they looked at building their capacity in other areas, it would be much easier."

Those standards include job descriptions that also define the skills and knowledge an employee needs for the job.

Biernacki-Dusza and her colleagues outlined four roles within each of those commodities: entry level, experienced level, supervisor, and manager.

Unlike other industries, where most workers have defined roles, a farm employee may be just expected to show up and to fit in, doing the jobs that they get assigned.

After all, that's what farmers do too. On any given day, most farmers do a combination of jobs that range in skill level from labourer to senior manager, Biernacki-Dusza says. "I think that's such a unique thing."

However, while that kind of flexibility can seem a plus to the farmer, it can leave the employee uncertain about what's expected of them.

That doesn't mean the approach is wrong. It just makes it more important that the farmer and the employee get on the same page, especially because the non-farm employee is likely coming from an environment where jobs have very clear roles and expectations.

So while a farmer might wonder why anyone would bother defining all those roles in the first place, a lot of it is about outlining the expectations and tasks of an entry-level employee when the farmer hires help.

On the farm, Biernacki-Dusza explains, information tends to be passed along verbally, making it easy to miss something.

YOU'RE STILL THE BOSS

Having employees means you need to be able to talk to them about your expectations. You also need to manage their performance, and you need to be able to do that while taking on all the other tasks that come with being a manager.

And that can actually be more difficult in a farm context, partly because there can be an unwritten tendency for the employee to almost become part of the family, says Knibbs.

"I think those relationships are wonderful when there is that camaraderie," she says. "But I've seen that camaraderie get in the way of good business."

Biernacki-Dusza agrees farmers need to have some formality in the employer-employee relationship. "It's to protect yourself, and to protect the employee." Writing everything down helps avoid surprises, as everyone knows what to expect if there's a dispute, she says.

And it's not just the non-family employees who can benefit from good HR leadership, although farmers do need to keep in mind that if family members are treated differently than other employees, those employees might perceive unfairness, Biernacki-Dusza says.

It's an extra reason for having actual job descriptions. Besides, she says, those descriptions will also make it easier to navigate your way through succession. Job descriptions simplify the transfer tasks to the next generation, so the kids can have some autonomy and not have Dad looking over their shoulder all the time.

As well, descriptions can make it easier to assign a son or daughter to supervise an employee (or employees). With a description, everyone can be clear on how the job will be assessed at the end of the day, and it will be easier to mentor the son or daughter on their leadership skills.

> **"Ask yourself, "How good am I at leading my employees? Would they agree?"**

DO IT YOURSELF OR CONTRACT IT OUT?

When Knibbs went into business, one of the best pieces of advice she got was, "Know what you do well, and buy the rest."

This advice probably rings true for many farmers too, who are no strangers to contracting services from agronomists, custom harvesters, and accountants. Taking on more land feeds into this need as well.

"Time pressures tend to help you sort out your priorities," Knibbs says. Farmers need to decide what they do well because that's where they can be effective and make their money.

Whether farmers decide they have the skill set to manage people, or they are willing to develop it, is partly a personal choice, Knibbs says. A lot of it comes down to whether the farmer likes doing it, and how it fits into the overall business plan.

Some farmers can justify hiring a foreman, or contracting an HR firm to help with bigger questions such as how to hire and keep employees. But the day-to-day stuff is still going to be in their hands, Knibbs says.

"If you are going to have employees, you can never run away from being a supervisor," she says. As the farm grows, someone will need to be able to manage people. Usually, farm families figure out who has the best head for it, she says, which is a good approach.

"You have to look at the people in your family, each individually, because everybody has certain skills," says Biernacki-Dusza.

Knibbs says there's no magic test to measure a person's HR skills. But there are all kinds of self-analysis tools to figure out what kind of leader you are, she says.

To Knibbs, asking questions is the key to evaluating one's HR potential. "How good am I at leading and managing my people?"

Next, Knibbs says, it's a matter of figuring out whether expectations of employees are clear, whether the farmer is following laws and regulations, and how the farm's recent hires have turned out. Knibbs compares it to asking questions about a crop rotation. How did the barley perform when it followed the lentils?

Biernacki-Dusza suggests farmers read through CAHRC's Agri HR Toolkit, an online resource that goes through what farmers need to know to manage people. If a farmer wonders if they need help hiring employees after reading through the recruitment and retention section, she says, they probably do. **CG**

Manitoba Co-operator | CountryGuide | Alberta Farmer | The Western Producer | Grainews | Canadian Cattlemen | AGDealer

COMING SOON!

Members get more!

Glacier FarmMedia is Canada's largest agricultural publisher, producing more than 20 print and electronic titles that include many of the most trusted names in Canadian agriculture.

When you sign up for a **Glacier FarmMedia** member account — you can access free news, markets, weather, equipment alerts, special deals on ag products & services — on your mobile, tablet or desktop!

Go to **membersgetmore.ca** to sign-up today - ***It's free!***

GLACIER farmmedia MEMBERSHIP

membersgetmore.ca

CHINA WANTS MORE

The traditional Chinese diet is becoming more westernized, changing consumer food demands.

This time, it's China's demand for safe, high-quality foods that is exploding

BY LILIAN SCHAER

For almost any marketer or producer of just about anything, the Chinese market is one they're eager to get into. The world's most populous country boasts a potential 1.4 billion customers, and both its middle class and their purchasing power are on the rise.

Research by consultants McKinsey & Co. suggests that by 2022, more than three-quarters of China's urban consumers will earn between 60,000 and 229,000 yuan renminbi (approximately C$11,600 to C$44,400) a year.

Only four per cent of urban Chinese households had earnings in that range in 2002.

That explosion can be directly attributed to the rapid pace of industrialization and urbanization that has been ongoing in China since the 1980s. According to the World Bank, only 16 per cent of China's population lived in urban areas in 1960, increasing to 56 per cent by 2015 and expected to keep edging up to 60 per cent by 2020.

THE NEW MARKET

For a long time, China faced a problem of quantity when it came to feeding its people.

Today, the problem more often than not is quality, which may be good news for Canada's farmers.

Various scandals involving food have shaken Chinese consumer confidence in domestically produced items, with the melamine scandal of 2008 marking a watershed moment in the Chinese food industry.

In that crisis, which killed six infants and sickened 300,000 people, products from one out of every five Chinese dairy companies were found to be tainted with melamine.

That lingering distrust, combined with the rising wealth of the middle class and more food availability, means that Chinese consumer demand is changing from focusing on having enough food to caring about quality.

Increasingly, too, Chinese consumers are paying more attention to where their food comes from, what it contains, and how it was produced.

Nor will it stop there.

"China is developing. First we had a focus on nutrition, then nutrition with quality," explains William (Wim) Smits, director of farm management service with DeLaval in China. "Now the higher middle class wants emotional satisfaction as well."

That evolution is driving change in Chinese agriculture. In the dairy sector, for example, post-melamine tightening of food safety and quality regulations saw large dairy processors change their buying practices from so-called "middle men" — those selling pooled milk from smaller village milking centres representing many small farmers — to either buying directly from only two or three large farms or producing their own milk.

Now the market is starting to see the emergence of smaller local milk brands, says Smits, where local farms are selling dairy products back to their own villages.

"This is for people wanting to know where their milk comes from. A local brand is one from a single farm, always above 1,000 cows, that produces and processes its own milk," Smits says. "Food is a big part of Chinese culture."

Wondermilk is one such example, a high-quality local brand sold in Beijing that prides itself on producing all of its milk at its own farm, Huaxia Dairy Farm, which is located only 50 km from the Chinese capital.

The impact is felt in other sectors too, as China's co-operatives are faced with increasing quality demands for their crops, including reducing chemical use and growing interest in organic production.

Lan Jiasheng is the general manager of the Jianhu Lantian Agricultural Machinery Co-operative established in 2007 near the city of Yancheng in Jiangsu Province north of Shanghai. The government has raised its standards for crop quality and will now turn away a substandard crop, he says, which didn't used to happen in the past.

"In the old days, we had a quantity problem and now we have a quality problem with people worried about residues," he says. "We can't test everything so we also need to focus on organic production. As Chinese people have higher living standards, they focus more on health and are willing to pay more, so this is a growth area for the future."

Chinese government regulations for organic production published by the national agriculture ministry are very strict, he adds, and include fertilizer and pesticide bans, fallow periods and using cover crops to enrich the soil.

It's a similar story at the nearby Liyang Haibin machinery co-operative, which is adding a focus on organic and so-called "green" standards to its business.

The co-op's president, Haibing Wang, says the price he receives for his organic crop is three times higher than his conventional output, but he has to balance that with lower outputs and stricter standards for soil and inputs. Of the co-op's 320 hectares, 20 are currently in organic production.

"We see 50 to 60 per cent less yield from our organic crops," Wang says. "I have a vision for the future but also have to face the reality that it takes three to five years to go organic."

The co-op is expanding by adding new farmland, but also trying to do a better job with its existing acreage, he adds, as well as introducing new businesses. That includes something new in China — agri-tourism. Many urbanites like to "sightsee" in the countryside, so the co-op organizes tours of its locations during cherry blossom or canola flower season, for example.

Agri-tourism is also part of the offering at the Beijing Xingnongtianli Agricultural Machinery Co-operative near Beijing, which works approximately 2,000 ha and provides agronomy, equipment repair and cropping services for over 2,000 farms.

"People from the urban areas come to the farm to see wheat and corn harvest," says co-op president Chen Ling, who adds that city dwellers can also use small land plots at the farm to grow their own vegetables.

For Canada's farms, the opportunity is to build brand loyalty before China's farms recover from food scandals

Haibing Wang of the Liyang Haibin Co-op in Jiangsu Province says he can get three times the price for organic crops, but he is still 90 per cent conventional.

On livestock operations, the growing social conscience of Chinese consumers means improvements in animal welfare and environmental management, says DeLaval's Smits.

"People still worry about people first here, but we see animal welfare changing too," Smits says. "The advances are rapid. Five to 10 years ago we had no sand bedding on dairy farms, for example."

China's new dairy farms are world class, he adds, using the latest technologies and welfare standards and averaging 40 to 42 litres per day per cow with many older animals in the herds.

The rapid rate of urbanization in China also means a growing westernization of the population's diet, another

CONTINUED ON PAGE 54

Although Chinese consumers are starting to regain their trust in their food system, foreign infant formula is still in great demand, despite its high price.

A three-litre jug of Canadian canola oil sells for the equivalent of $22 at the Sanyuanli Market in Beijing.

contributor to changing consumer buying habits. The traditional Asian diet doesn't include much dairy, for example, but that's been changing rapidly.

According to the Dairy Association of China, when the People's Republic of China was formed in 1949, dairy consumption was practically non-existent, at only half a litre per capita per year with a national population of 541 million. By 2015, that consumption level had risen to 36.1 litres per capita — largely in milk and yogurt — among a population of 1.3 billion people.

"Breakfast habits are changing. The traditional Chinese breakfast takes a long time to prepare and with urbanization, you westernize, which means yogurt, bread, and starting to drink milk," says Sören Lundin, DeLaval vice-president for Asia Pacific.

Despite the growing quantity and quality of Chinese-produced food, though, Western food remains popular — a boon to food exporting nations like Canada seeking to expand existing markets in China or add new ones.

Tetra packs of milk from Denmark, Germany, New Zealand and Australia line the shelves of Chinese grocery stores, and North American and European cooking oils, cereal, confectionary and dry goods are widely sold in both online and traditional market settings.

A three-litre jug of canola oil from Manitoba, for example, was priced at the equivalent of $22 at one Beijing market that targeted higher-end shoppers.

Foreign baby formula, too, remains a hot seller despite its high cost (up to 436 RMB or approximately $85) compared to domestic product (76-80 RMB or approximately $14-$15).

"The trust is coming back (in food) but not in infant formula," explains Smits. These middle class one-child families, he says, are willing to pay more to buy food they trust. **CG**

Lilian Schaer is an Ontario-based freelance agricultural writer who recently travelled to China as part of an Exposure for Development tour organized by the International Federation of Agricultural Journalists.


BAYER
Velocity m3
More power to you.
Wind speed, pressure gauge, optimal nozzle settings, check. All systems are go and it's time to take down the toughest weeds in your wheat field, whether they're resistant or not.
With three different modes of action in a single solution, Velocity m3 herbicide provides you with exceptional activity on over 29 different tough-to-control grass and broadleaf weeds.
Bayer
cropscience.bayer.ca/Velocitym3 1 888-283-6847 @Bayer4CropsCA
Always read and follow label directions. Bayer CropScience Inc. is a member of CropLife Canada.
C-60-01/17-10686442-E

Young AND old

The farm version of the generation gap means that succession talks on many farms stall before they even get a fair chance to start. Here, adviser Delores Moskal shares her ideas for seeing eye to eye.

BY LISA GUENTHER / CG FIELD EDITOR

When it comes time to put succession planning on your personal agenda, there are only a couple of ways for it to go, says Delores Moskal. There are the parents who are open to talking succession with the next generation. And then there are parents reluctant to even broach the subject with the kids.

So it raises the questions: If you're on a farm with the second type of parent, how can you kick-start the process? What can you do to get yourself ready? And, perhaps just as importantly, what should you do if nothing works, and Mom and Dad still won't talk?

Moskal grew up on a farm near Ituna, in central Saskatchewan, and she still lives in the same area, on her husband's family farm. She has also spent over 30 years working for the Cornerstone Credit Union in rural Saskatchewan, filling roles such as lender and investment specialist. Today she's a self-employed certified financial planner and registered retirement consultant, and much of her work focuses on helping farm families with succession planning.

Both sides – the parents and the kids – need to take a realistic look at what will happen if the succession talks don't work out, Moskal says

Moskal's voice is calm, almost musical, and she leaves the impression that nothing fazes her.

Every family is different, she says, so the tools that work in one situation might not work in another. But she does like to start by going through Elaine Froese's key challenges audit sheet. That worksheet will help each person identify the challenges they see in the succession process, she says.

"And it's going to be different for everyone," she repeats. In fact, Moskal says the audit sheet can be an eye-opener, with one person in the family seeing challenges where another sees a green light.

But there's another first step too. Moskal finds that some parents are afraid to be bold and open about their situations with their kids, so the first challenge is helping them get past that fear so they can at least start the conversation.

The root of parental reluctance varies. Sometimes it's because they aren't impressed with their kid's work ethic, Moskal says. She says they want to ask the kids, "How far would you get if you were working for an employer who wasn't your parent if you showed up to work at 10 o'clock?"

If you're a kid on that farm, that's a real question to deal with (see sidebar).

Problems can also stem from a combination of assumptions and entitlement. Moskal has heard stories of young farmers who had rental agreements with parents, but didn't pay them out.

"And then when they're asked, they go: 'Well, it's going to be ours anyways.' But in the interim, Mom and Dad still need an income from there. They shouldn't be drawing on their savings," says Moskal.

The kids might assume their parents have always been good savers, but they really don't know, she adds.

Other financial issues might be at the root of parents' hesitation to start transferring the farm if both generations are going to be on the farm, Moskal says.

"How much does the farm need to pay you to support your lifestyle? And how much are you willing to give up in your current lifestyle so that the farm can still be viable?" Often the farm is the parents' pension plan, and they'll need to figure out how to get their cash out, she adds.

One thing that never works is bullying, Moskal says. The warning signs aren't always clear, at least not at first, but Moskal thinks it often comes down to a lack of respect.

If a parent is controlling, it can be very hard for the successor to pull the plug, especially as they invest more years in the family farm. "And then it gets to the point where you're 60 and your parents are 80 and you still don't own the land in your own name."

Bullying can come from the younger generation, too,

especially if there's a power imbalance. "In some situations the parents can only farm if their kids help them because it's a labour issue."

People can get stuck, and they might sever the relationship in the end, so it might be best to take a step back and think about what's best for both parties.

WHERE DO THE ISSUES LIE?

Often family relationships and business are blended together, and it can be hard to see where the issue lies.

The farm business must be viable, and must provide income to sustain the family's lifestyle, Moskal says. Or sometimes, family members who aren't farming want a say in business decisions, but farm business decisions should be between the people farming, she adds.

However, family issues need to be acknowledged, too, Moskal says. How do the non-farming siblings fit in? Will they be entitled to anything as part of their parents' estate? Who else has a stake in the farm?

Finally, there are also ownership issues. Young farmers seeking to open the conversation might want to think about whether farm transfer needs to start with ownership. Perhaps they can start by taking on more management to prove themselves, Moskal says. "And eventually there will be that transfer of ownership. It happens in stages."

Often relationships break down under the weight of too many assumptions and not enough communication. Moskal suggests talking while relationships are good, before farm families run into the tough situations, such as an unexpected death. "It just gets ugly. So to avoid the ugly, you just need to say what would we do if this happened?"

For those young farmers who don't feel they can start the conversation with their parents, Moskal suggests looking for people who can mentor them through that first step. That might be as simple as turning to friends who've been through it and asking what worked for them.

Bringing in a third-party to facilitate the meeting can also help, says Moskal. A third party can help take the emotion out of the discussion, and ensure everyone has a chance to voice their concerns. Somehow, a bridge must be built. **CG**

Get your own ducks in a row

As a financial planner, Delores Moskal often feels like a GPS system, pointing her clients to professionals to help them with succession planning. But before farmers can assemble their dream team of advisers, they need to figure out their own objectives, she says.

Once young farmers have goals, aspirations and dreams to work towards, Moskal advises saving some cash to buy into the farm. She also says young farmers need to get a good handle on what it costs to fund their lifestyles and responsibilities, such as family vacations and their children's educations.

Tracking personal expenses isn't an enjoyable task for many, but it helps families figure out how much they need from the farm and any off-farm jobs. Quite often the spouse manages the family's personal finances (and often supports the family through an off-farm job), but Moskal says all the responsibility shouldn't fall on one person.

However, the reality is that the farm business can suck up a lot of time, and it's not good for people to spread themselves too thin. Moskal suggests putting the family expenses on automatic as much as possible by doing things like tracking spending through online banking systems.

Moskal has surveyed clients about barriers to financial planning, and those who procrastinate say they just don't have time. Time is a friend to anyone in the midst of financial planning and farm succession, but Moskal points out it's not a given. She worries about what would happen if the farming spouse died prematurely. Would the other spouse have enough money to either buy out the in-laws or walk away from the farm?

It's a tough thing to even consider, but Moskal says farmers should pretend they are going to die tomorrow, and then work through what their families would do. It's a good idea to collaborate with the people you need to while you can, in case of an unexpected death or soured relationship.

Succession planning isn't easy, but Moskal has seen plenty of success stories over the years. She mentions a young couple who recently moved onto the farm. The parents built a new house a ways down the road, but they're still involved in the farm. The succession plan has worked out really well, she says.

As for young farmers just starting out, Moskal says there are many roads to transitioning the farm.

"We just have to find out what's the best route for you."

Can you develop a thriver's mindset?

These seven steps will help you thrive, not just survive

We face challenges and disappointments. What is it that determines whether you will overcome these and thrive, or merely survive? Some people have developed a thriver's mindset. They are masters of challenge and change. They grow during difficulties by leaning into stress, and by relying on special resources.

There is good news, however. Science is showing that everyone has the capacity to develop this mindset.

In agriculture, as in other industries, we all know entrepreneurs who seem to grow, learn, and take the best from every situation. From research and from my experience as a coach, here are seven traits that stand out in these thrivers:

1. They know what helps them thrive.

For every area of their business and personal life, they know specifically what they want to become, develop or possess. This allows them to put their resources, energy, and focus toward those things that will bring them closer to those goals.

2. They balance the elements that are essential for their well-being:

- Career well-being: identifying and using the strengths of yourself and those around you every day, choosing tasks according to these resources.
- Social well-being: having strong, loving relationships (family and friends).
- Financial well-being: effectively managing your economic decisions.
- Physical and psychological well-being: having good health and enough energy to consistently get things done.
- Community well-being: the sense of engagement you have with the area where you live, doing something for a greater cause.

3. They know their big "why."

In addition to knowing what makes them thrive, they also know why they value certain things. They are clear about their motivations. However, not all values and motivations are equally beneficial if your goal is to thrive. Research shows that:

- Intrinsic motivations and values, such as autonomy, self-actualization, harmonious interpersonal relationships, ethics, integrity, and a cause greater than oneself are associated with greater happiness and life satisfaction.
- On the other hand, pursuit of extrinsic motivations and values, such as social success, wealth, recognition, and prestige leave one more open to stress, anxiety, depression, and dissatisfaction.

4. They act according to their values in their daily life. Momentary choices and experiences accumulate to shape our everyday lives, so your micro actions lead to macro results. A small decision in farm management may have a significant impact in the months and years to come.

5. They learn to be intensely focused.

"Attention" has become one of the fastest-growing areas of study in psychology and neuroleadership. It is now recognized as a major issue in a world in which new technologies grow at light-speed rates, bombarding us with choices and making it even more difficult to focus on priorities. Our attention is hijacked by emails, texts, phone calls, and other environmental demands. In addition, there is always another journal, salesperson, or consultant telling you what to think, do, or desire. These demands distract from what is most important in order to thrive, not just survive. How you allocate your attention will substantially determine what you get in life.

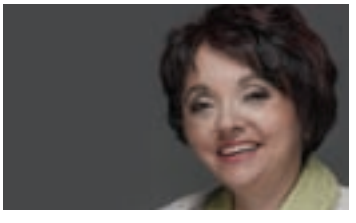
6. They persevere in the face of challenge, and they have a positive sense of their capabilities. They know that, with the right resources, help, time, and energy, they can succeed.

7. They have "psychological flexibility." They can switch their attention, changing their goals, deadline, or strategies. They are open to considering different actions to achieve their life goals.

So, in order to develop a thriver's mindset, here are a few interesting questions:

- What is really important in all areas of your life (farm, family, community, etc.)?
- What do you want your life to be like in the next year? In five years?
- Why?
- What are your values? Are you being true to them?
- Do you walk the talk?
- Why don't you do the things you know you should be doing?
- What can you do today to improve?
- What can you learn from your mistakes?

Everyone has the capacity to develop a thriver's mindset. But it does require effort, perseverance and courage. **CG**



Pierrette Desrosiers, MPS, CRHA is a work psychologist, professional speaker, coach and author who specializes in the agricultural industry. She comes from a family of farmers and she and her husband have farmed for more than 25 years. Contact her at: **pierrette@pierrettedesrosiers.com. www.pierrettedesrosiers.com**

EAT TOGETHER:
Have a healthier family

20 years of research proves that sitting down to eat together is good for body, brain and mental health

BY HELEN LAMMERS-HELPS

Here is one thing you can do that will help your kids succeed in school and life, and it's as simple as making it a habit to eat together as a family. It sounds too good to be true, but true is exactly what it is.

That's according to Dr. Anne Fishel, a family therapist in Cambridge, Massachusetts, who should know. The author of *Home for Dinner*, Fishel literally wrote the book on healthy family meals.

She is also the co-founder of the Family Dinner Project, a non-profit organization that aims to help families have more fun, more meaningful conversations and healthier family dinners.

Fishel says the research is very compelling. When it comes to physical health, home-cooked meals tend to be better for us than restaurant or take-out food. Home-cooked meals are lower in fat, sugar and salt, and kids who eat at home consume more fruit, vegetables, fibre and vitamins than kids who eat out.

Studies have also shown that dinner conversations are better boosters of a child's vocabulary and reading ability than even reading to your kids. And whether or not a child regularly eats dinner with their family is a better predictor of their academic performance than doing homework.

Teenagers who regularly eat dinner with their families are less likely to have high risk behaviours such as substance abuse, they are less likely to be violent, and they are less likely to suffer from anxiety and depression.

And even after children leave home, the protective effects continue, with young adults less likely to be obese and more likely to eat healthily.

Fishel is only half-joking when she says that if more families ate dinner together, her counselling practice would go out of business.

Yet while eating meals as a family sounds simple, in reality it can be tough to do on a regular basis. Fishel says surveys show only about half of families eat dinner together five or more times each week. With the pressures of field work, equipment breakdowns, off-farm work, kids' activities, elder care and volunteer commitments, finding a time when all family members can sit down together for a meal at home can be challenging.

Fortunately, the positive effects of shared family meals aren't limited to dinner. With a little creativity, you may be able to find more ways to bring family members together for sustenance. It could be breakfast after the morning chores are done, an after-school snack, or even a bedtime snack.

Fishel says that any block of time you set aside to be together to connect with one another will suffice. During harvest, it can even be a picnic on the truck tailgate.

While the research is based on eating together at least five times a week, Fishel anticipates there would still be advantages if it was less often. The power of family comes from the quality of conversation around the dinner table. It's a time when families can tell

CONTINUED ON PAGE 60

Managing conflict at the table

5 Tips from "Home for Dinner" by Dr. Anne Fishel

1. Have your difficult conversations somewhere else, not at the supper table.
2. Go easy on teaching manners at the table.
3. Set some guidelines for conversation, if necessary, such as "only one person speaks at a time" or "we're not going to interrupt each other."
4. To prevent complaints about the food, which is one of the greatest sources of conflict at the table, create a list of acceptable meals that everyone agrees to eat without whining.
5. Set and adhere to rules for using phones or other technologies at the table.

FISH TACOS (FOR 4)

This recipe was created by the son of Dr. Anne Fishel to recreate a version he ate from a food truck. Dr. Fishel says re-creating a dish at home that you've tasted at a restaurant (or food truck) can be fun — a great shared activity.

2 tablespoons white or champagne wine vinegar

1 tablespoon sugar

1/2 teaspoon salt

1/2 red onion, thinly sliced

1 pint cherry tomatoes

1/2 red onion, finely diced

Juice of 2 limes

Salt and pepper

1 avocado

1/4 cup mayonnaise

1 teaspoon lime juice

1 cup all-purpose flour

Cayenne pepper to taste

1/4 cup canola oil

1 pound cod fillets or other firm white fish

1 (8-count) small package soft corn tortillas

Mix the vinegar, sugar, and salt in a small bowl. Pour the mixture over the sliced red onions and let sit for at least one hour. This sets up a very quick pickling process.

Halve the cherry tomatoes and combine them in a bowl with the finely diced red onions, the juice of two limes, salt, and pepper. (If you're feeling adventurous, add a small chopped jalapeño pepper, with seeds and ribs removed.)

Scoop out the avocado and mash it with a fork in a small bowl. Add the mayonnaise to the avocado, and mix until creamy. Season with 1 teaspoon lime juice and salt and pepper to taste.

Combine the flour, salt and pepper, and cayenne pepper in a shallow baking dish or high-rimmed plate. Slice the cod into 3-inch-long chunks. Dredge the fish in the flour mixture. Be sure to remove any clumps of flour that adhere to the fish, since these will just burn in the pan.

Heat the canola oil in a frying pan over high heat. (Don't be afraid of cranking up your stove to the highest flame and watching the oil smoke.) Place the cod into the pan, making sure not to overcrowd it, which will bring down the temperature in the pan. Fry for two minutes on each side. Any more will dry out the fish and make it rubbery.

Just before serving, heat the tortillas in a dry saucepan over low heat.

Now it's time to assemble the tacos. Spread the avocado cream in a thin layer on each tortilla shell. You'll need two tacos per person. Place a piece of cod on the avocado spread. Top the fish with the cherry tomato salsa and pickled onions.

stories about the things that happened to them, seek advice about how to handle challenges that came up that day, or talk about issues going on in the world. The dinner table can also be a place to seed important family values and promote a sense of belonging.

With a lack of time being the No. 1 reason families cite for not eating together on a regular basis, Fishel shares some tricks that help make it easier to get a healthy meal on the table in a hurry.

Use shortcuts. You could pick up a grocery store rotisserie chicken and then make a healthy salad to go on the side. The carcass can be used to make a healthy chicken soup the next night.

Make double batches and freeze half so you have an extra meal for a night when you don't have time to cook.

Swap meals with friends. If four of you each make a quadruple batch of a favourite meal, then you have three meals to swap with each other.

Serve quick foods for supper. Eggs, pancakes with fruit, or soup and salad make healthy but quick meals.

If satisfying multiple tastes is a problem, choose build-your-own meals such as mini-pizzas or tacos.

Older children and teens can be involved in menu selection, preparation and cleanup. If teens are reluctant to eat at the table, have them create a music playlist, ask them how a recipe could be improved, or find out what conversation topics are out of bounds. You don't need to bring up a teen's poor score on a math test at the table, says Fishel.

And while getting everyone around the table is half the battle, modern technology may prevent family members from truly connecting with one another at meal times even though they are physically present.

Phones and other screens should be used judiciously at the table. Screens prevent face-to-face connection during the meal. In fact, surveys have shown that parents tend to be the worst offenders.

Fishel recommends putting phones away but says some families will allow them solely for the purpose of sharing a funny text or photo or for Googling to settle a dispute.

Perhaps the most important thing you need to do to make family meals a reality is to prioritize them. Fishel estimates it only takes an hour to make, eat and clean up from a family meal, asking "What else can we do that takes only an hour a day but packs such a big punch?" **CG**

FRITTATAS (FOR 4)

Frittatas can make a quick supper. Recipe reprinted with permission from *Home for Dinner* by Dr. Anne Fishel

8 large eggs

1/4 cup milk

Salt and pepper to taste

2 tablespoons oil or butter

3 cups vegetables (any combination of onions, asparagus, red pepper, scallion, cherry tomatoes, mushrooms, or whatever else you have on hand)

1/3 cup shredded Parmesan, cheddar, or Swiss cheese

Crack the eggs in a large bowl and whisk with milk, salt, and pepper.

In an all-metal skillet, heat the oil or butter, and then add the vegetables. Sauté for 5 to 10 minutes, or until the vegetables are softened.

Pour the egg mixture over the vegetables, and let this concoction sit over moderate heat until it looks mostly cooked through — less than 5 minutes. Sprinkle the cheese over the egg mixture, and place the pan in the oven under the broiler for about 5 minutes, or until it looks golden. When you remove the pan from the oven be sure to use a pot holder.

Serve the frittata with a hunk of bread and a salad, and you'll have a healthy, cheap meal made in less than 20 minutes.

Resources

Home for Dinner: Mixing Food, Fun and Conversation for a Happier Family and Healthier Kids by Anne K. Fishel (American Management Association, 2015)

Food, Fun and Conversation: 4 Weeks to Better Family Dinners, free online program at www.thefamilydinnerproject.org

More ideas for quick meals:

Food Bloggers of Canada "On Board in 20" recipe series at www.foodbloggersofcanada.com/category/food-drink/on-board-in-20/

OH, MY HEAD hurts

Hitting your head may just give you a headache, but you should never dismiss the hit as a minor injury. About 2.5 per cent of the Canadian population injure their heads each year, so it's not an uncommon problem. But it can be serious.

The type of head injuries that you hear most about in the news are those that happen while playing sports. Just think, for instance, of hockey player Sidney Crosby. These traumatic brain injuries can cause blood clots, problems with cognition or thinking, changes in vision and perception, headaches, and even seizures.

Don't just shake off a head injury. Get it checked out. Brain injuries can lead to serious consequences that may not appear for decades

With ongoing head injuries, the effects can be serious and lead to dementia. Pugilistic dementia, for instance, is a type of dementia that results because of repeated blows to the head in boxing.

You may not play hockey or box, so you may believe that you are not at risk for any of these effects. However, what you may consider a minor hit to your head as the result of a fall can lead to seizures later in life.

A seizure is a sudden surge or change in the electrical activity of your brain that brings about loss of consciousness and control over your muscles. About 0.6 per cent of Canadians live with seizure conditions, and there are over 60 types of seizures depending upon the cause, symptoms and duration.

Seizures can occur at any age, but young children and older adults seem to be more at risk, and more men than women are affected. Genetics do play a role because your risk increases if you have family members that also have seizures.

Dementia, strokes, and brain tumours affect your brain and can result in seizures, as can high fevers. Children with a diagnosis of autism seem to have a higher incidence of seizures. Low levels of electrolytes (that is, the minerals that circulate in your body) and low blood sugar have also been linked to seizures. And, for developing babies, their mother's drug use can result in seizures in newborns.

As you probably have guessed, damage to the normal functioning of your brain interferes with its electrical activity and produces seizures. However, sometimes a diagnosis of a seizure condition is made and none of the usual causes are present.

The seizures are often tracked back to a head injury many years ago that over time causes the changes resulting in seizures.

This means you may not even connect your fall from a tree that injured your head when you were a child to your seizures as an adult, several decades later!

If you do have seizures, a wide variety of drugs are available, for example phenytoin, carbamazepine, divalproex, lamotrigine, topiramate and clobazam. They work by affecting neurochemicals in your nervous system, with different drugs affecting different neurochemicals.

Unfortunately, there is no specific test for seizures that will tell you which neurochemicals need to be treated. Thus you may need to try several different drugs or a combination of two or more to achieve the best possible control.

Some people are able to identify triggers that lead to their seizures, and avoiding the triggers may reduce the incidence of seizures.

Missed medication, lack of sleep, illness, alcohol or illicit drug use, flashing or strobe lights, hormonal changes, and poor eating habits are some potential triggers.

Ideally, you want to prevent head injuries to reduce your risk for seizures. This involves common-sense safety precautions that we should all integrate into our routines.

Always wear you seat belt in a car, and always wear the appropriate head protection when playing sports or riding a bicycle.

Most falls occur in the home, so make sure you home is as fall-proof as it can be. Mild bumps to your head may not cause seizures, but repeated head injuries can — which means you may need to stop playing your favourite sport. And, if you do experience a head injury, have it evaluated, because any head injury can be serious. **CG**

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

NEXT ISSUE

Getting older can be problematic for your eyes, and as the Canadian population ages, several companies are promoting products for older eyes. Next issue we'll talk about some age-related eye conditions as well as bothersome problems like dry eyes.

This year, it's going to be different

The calendar makes the rules, even when that load of durum is late

It was cold enough that the machinery had to work extra hard and a thin layer of frost had formed on Jeff's eyelashes. He hated working after dark.

"Could be worse," he thought. "I could be Phil, hauling grain here to be cleaned on a Sunday night."

Once Phil drove off and Jeff had the durum running through the cleaning plant, he headed for the house.

Inside, Elaine was at the kitchen table with their son Connor while their daughter Jenny coloured in the living room. Elaine and Connor had red and white papers spread all over the table. Connor's face was screwed into a pout that looked like it might last all week.

"Come on," Elaine was saying. "Just five more."

"I hate this," Connor said, giving his mother a stink eye that could have scared any sane person into never having children.

Jeff considered going back outside. Surely a little frostbite was better than whatever was going on in here.

"I'm not torturing him," Elaine explained. "I wrote on the envelopes. All he has to do is write his name on Valentine's cards for the kids in his class."

"I feel for you, kid," Jeff said. "That's the kind of thing only girls like. You know, your grandma used to make me write my name and the other kid's name on every card."

Connor's eyes widened at the horror.

"It's Valentine's Day tomorrow already?" Jeff asked. How had February gone by so fast?

"Tuesday," Elaine said. "He has to print six letters on 24 of these things. I thought we'd need two nights."

"I'll leave you to it," Jeff said, ignoring Elaine's glare as he went to the office and closed the door.

Last year Elaine had surprised him with a great homecooked meal, new workboots, and a half a dozen new songs on his iPod. Jeff had tried to pretend he hadn't forgotten by quickly ordering an online gift certificate, which didn't fool Elaine at all.

This year would be different. He didn't want to let Elaine down. She was a great mother, she was an important part of the farm, and his whole family loved her almost as much as he did.

Jeff thought a minute, then Googled the number for Elaine's favourite restaurant. It was in Regina. "We'll spend the night," he thought. His parents could watch the kids. "The Hotel Saskatchewan," he thought. She loved it.

He called the steak place first.

"I'm sorry sir. We've been booked for months."

"Months?" Jeff answered. "People plan that far ahead?"

Undaunted, Jeff tried Elaine's second favourite restaurant. But the call to the Greek place went exactly the same way.

The woman on the phone at the third restaurant gave the same answer, but at least she was apologetic.

"Fine," Jeff thought. "We'll order room service at the hotel."

But the call to the hotel was no different than the previous calls.

"I'm sorry, sir. But a lot of people reserve rooms here for Valentine's Day," the reservations clerk said.

Then Jeff had an idea. "Surely you hold back a few rooms… in case any important clients come in? Maybe for a… special tip… we could have one of those?"

"I could never do that, sir," the clerk said. "Especially not over the phone."

After breakfast the next morning Jeff told Elaine he was going to Regina.

"I thought you had Phil dropping off more durum today," Elaine said.

"I put him off until after lunch. I need parts for the auger."

"You can't get them in Weyburn?" she asked.

"Nope. I called last night," Jeff said.

"I wondered who you were calling while I was in Valentine's hell," Elaine said.

On his way to Regina Jeff stopped at the Weyburn bank for two crisp hundred dollar bills. Then he called his mother. "I know you and Dad have only been home from Arizona for a couple of days, but would you mind coming across the yard to stay with Connor and Jenny tomorrow night?"

"Of course," Donna agreed. She knew that many of her farm-wife friends would give their right arms to have a daughter-in-law like Elaine.

Jeff drove toward the city, grinning.

On the afternoon of February 14 Elaine was in the office reconciling their bank accounts when Donna knocked on the door.

"Jeff left his balaclava in the shop," Donna said. "I just wanted to drop it off."

"I'm glad you're here," Elaine said. "I can't figure out this line item on the fuel bill. Can you explain it?"

"Those bills are always confusing," Donna said. "I had to phone that company every other month when I used to do the books."

Then Donna took a look at Elaine, and realized her daughter-in-law was wearing some old yoga pants and a cardigan with a hole in it, and her hair was up in a coil that looked like it could use some work.

"Do you want me to watch Jenny so you have time to get ready to go?"

"Go where?" Elaine said, still studying the fuel bill.

"Well, Regina. Jeff said you were leaving around 2:30."

"I wasn't planning to leave until 4:30. Cindy can't get here to

CONTINUED ON PAGE 64

look after the kids until… " Elaine stopped talking and her jaw dropped. "Wait. How does Jeff know we're going to Regina? I was planning to surprise him!"

Donna realized her mistake. "I thought you knew!"

"Knew what?" Elaine asked.

Donna forged on. There was no point in stopping now.

"Jeff has plans to take you to Regina. You have to act surprised."

Elaine smiled, and pressed Donna to tell her the details.

"You go home," Elaine said. "I'll hop in the shower. When Jeff comes in, I'll pretend I haven't heard a word about any of this."

After Donna left, Elaine couldn't stop smiling. She had the best husband in the world. And they were definitely two of a kind — they'd made almost exactly the same plans.

She called the steak restaurant to cancel the reservation for two she'd made months ago.

"Are you sure you want to cancel, ma'am?" the host asked. "We have a long waiting list"

"I'm sure," she said.

The clerk at the Hotel Sask was just as surprised when she called cancelled their room.

Elaine's friend Cindy, who had no kids of her own, was a little disappointed when Elaine said she didn't need her to spend the night with the kids after all.

"Don't worry… another time," Elaine laughed.

Then Elaine scrambled to get ready. She showered and straightened her hair, put on makeup, then dressed in a pair of old blue jeans and a sweater, so Jeff wouldn't realize Donna had filled her in on his plan.

Then, she waited.

Two-thirty came and went, but Jeff still hadn't come in.

When he wasn't in the house by three, Elaine assumed something had gone wrong in the cleaning plant.

He finally came in just after three-thirty.

Elaine looked at him, waiting.

"What's up?" he asked.

"Nothing," Elaine said.

"Okay. Should we have some coffee?" he asked.

When Elaine and Jeff were both sitting across the table from each other with coffee mugs, she realized he didn't look as happy as she would have expected.

"Plans for the rest of the afternoon?" she hinted.

"Not really," he said. "Your hair looks great. You aren't going out, are you?"

"Um…" Elaine said. "I guess not."

Jeff was silent, until Elaine finally cracked.

"Are we going to Regina?"

"What?" Jeff said.

"Your mom told me. By accident. She didn't mean to spoil your surprise."

"Oh no," Jeff said. "I forgot to tell her. We can't go."

"Of course we can," Elaine said. "Your mom told me how you drove all the way to Regina to make plans."

Jeff sighed. "All of your favourite places are incorruptible. I couldn't even bribe my way to a table next to the bathroom in that steak place or a cot in the hall at the Hotel Sask. I'm so, so sorry.

Elaine laughed, telling him about the reservations she'd cancelled until the school bus pulled into the yard and Connor raced in yelling. "Mommy! Daddy! It was Valentine's Day!" **CG**

Leeann Minogue is the editor of *Grainews*, a playwright and part of a family grain farm in southeastern Saskatchewan.

REFLECTIONS

BY ROD ANDREWS
RETIRED ANGLICAN BISHOP

"It has been a great life, but I would not want to do any of it over again." My friend is approaching his 80th birthday. I reflect on his remark. Would I want to live my life again? Parts of my life I would like to live again. Other parts I would not want to repeat.

I share my reflections with a friend. She suggests, "Imagine reliving one day from each decade of your life. Which days would you choose?"

I am in my 70s. I could choose seven days. Life has been full. I have had some fabulous experiences. Could I choose a day from each decade and relive those days in my mind?

How would you answer this question? Which days would you want to experience again? Which days would you prefer to forget? The Psalmist says we are given 70 years or so, "perhaps 80 if we are strong." Which days would you choose?

I made my list. I learned something about myself. The grand moments of each decade of my life are not remembered by spectacular events and distant travel. What I remember most is time shared with significant people. The people I remember best are people who made me feel good about myself. They gave me confidence and reassurance. Sometimes they prodded me to do better.

Arthur Foulds was the postmaster in Banff, Alta. I worked for him a couple of summers. I sold postage stamps to tourists mailing post cards home. Mr. Foulds gave me a lesson in economics. "Ask three questions: Do you need it? Can you do without it? Can you buy it cheaper somewhere else?" Jack Armstrong was a Second World War veteran who worked in the parts department of a car dealership in Stettler, Alta. As a student minister I was discouraged by the response to my visits. Jack sat on his back step one summer evening and listened patiently while I ranted about peoples' lack of conviction. "They would prefer to go to the lake than go to church on Sunday," I said. Jack's advice: "You are trying too hard, Rod. You need to take more time off… "

People like these have been there for me in every decade of my life. It is time with them I would like to relive.

I can dream about the past but I need to live in the present and move to the future. Marie-Louise Ternier-Gommers, her husband Jim and their daughter Rachelle grow garden seeds at Muenster, Sask. Marie-Louise, a writer and preacher, inspires me. She believes we need "to choose listening before judging, sharing before walking away, receiving before dismissing, and loving before condemning. If we can help one another learn to do this a bit more each day, maybe we will live into a renewed relationship, both with God and with one another in all the complexities and diversity of this broken yet beautiful world God has created."

Robert W. Service was a bank clerk in Whitehorse, Yukon. One of his poems is about having a vision and holding to it:

Have ever you stood where the silences brood,
And vast the horizons begin,
At the dawn of the day to behold far away
The goal you would strive for and win?
Yet ah! in the night when you gain to the height,
With the vast pool of heaven star-spawned,
Afar and agleam, like a valley of dream,
Still mocks you the Land of Beyond

"Life is not measured by the number of breaths we take, but by the moments that take our breath away."

Suggested scripture: Psalm 90, Proverbs 9:10-11

Rod Andrews is a retired Anglican bishop. He lives in Saskatoon.

BAYER

PARDNER®

TAKE CONTROL.

You've identified volunteer canola as a weed. Now it's time to deal with it.

For control of all volunteer canola, tank mix Pardner® herbicide with your pre-season application of glyphosate.

Make Pardner your first choice.

Bayer

cropscience.bayer.ca 1 888-283-6847 @Bayer4CropsCA

R-66-01/17-10707501-E

Here's to the farmer who's willing and able,
Who's at every meal, but not at the table.

Here's to the farmer who cares for the earth,
Who loves every creature and knows their true worth.

Who wears many hats with honour and pride,
With love for their business that shines from inside.

Who respects what they do and how to get through it,
Constantly learning the best ways to do it.

Who's open and honest and willing to share,
With nothing to hide, anytime, anywhere.

Here's to the farmer, who's in every bite,
Feeding the world and doing it right.

Canada's Agriculture Day is February 16th and FCC is proud to celebrate our wonderful industry.

Here's to the farmer. Here's to Canadian ag. Here's to you.

CANADA'S **AGRICULTURE DAY**

Farm Credit Canada
Advancing the business of agriculture