THE PORT PERSPECTIVE
A look at Canada’s busiest port authority

MOVING ON UP
Grain handlers are building all across the Prairies

LIFE IS A HIGHWAY
Custom combining and a life on the road
Ashok Sarkar and his team at the Canadian International Grains Institute (Cigi) develop new milling methods and promote Canadian wheat in over 40 countries.

The Wheat and Barley Check-Off supports new markets for Canadian grain.

Ashok Sarkar
Head of Milling Technology with Cigi
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NIRS’ potential to improve efficiencies in the cattle industry is just a scoop away.

Jessica Patterson
Jessica Patterson is a freelance journalist who has been published in various magazines and newspapers across Canada. Originally from the East Coast, she has lived and worked in Alberta for the past seven years. Jessica’s work has appeared in many publications, such as: Alberta Venture, the Calgary Herald and Okotoks Living.

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Sydney Duhaime is a communications coordinator with Alberta Barley. Sydney is also currently enrolled in the communications studies program at the University of Calgary. Her work has appeared in Barley Country and on gobarley.com. Sydney is a member of the Alberta Farm Writers’ Association.

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Mark Orenstein
Mark Orenstein, born and raised in New Brunswick, came to the West to find fame and fortune. Finding neither, he settled for an exciting life with his family in Lethbridge running a busy commercial photography studio that specializes in portraiture. When not behind the camera, he tries to get his money’s worth out of Netflix.

Leif Norman
Leif Norman is a professional photographer in Winnipeg, MB. He likes coffee, old technology, science, nice shoes and local history. He has been photographing since 1999, but only in the past few years has he been able to pay the rent, and also pay off his student loan for the chemistry degree he is not really using.
A new take on responsibility

RESPONSIBILITY. IT’S A SIMPLE word, but loaded with meaning. It’s easy enough to state that you are responsible for yourself, your home, your farm, your family. However, in agriculture the definition of the word responsibility takes on added significance. Whether you share agronomic information and dish the dirt, actually—dirt, on soil conditions and moisture rates, help a neighbour finish up harvest because your crop came off earlier or babysit kids so family or friends can have a night out, in farming, the definition of responsibility runs deep.

Yet being a farmer involves responsibilities that run even deeper than helping care for your families, friends and communities.

These responsibilities extend to how you tend to the land. For generations, you’ve done your best to maximize yields while minimizing input costs, in addition to setting up the land for next year’s growing season. Despite the work farmers do, how you care for the land from generation to generation remains an enigma to an increasingly urban population. People want to know that farmers are caring for the land sustainably, and that their food is safe and well tended before it gets to the grocery store shelves. So this means you’ve done your best to maximize yields (see story on page 22 for details).

This means that it’s your grains’ excellent quality that imbues Cigi staff with the confidence they need to show buyers Canada’s grain with pride. The end result is that your grain sets a high standard, which is why buyers from around the world are always after Canada’s high-quality wheat to blend with mid-quality wheat from elsewhere.

It comes full circle with the aforementioned buyers continually purchasing Canadian products, and we benefit at home with a sustained market demand. This demonstrates your responsibility doesn’t just end at the farm gate—your checkoff dollars, when invested prudently, are returned to us 20-fold and the effects are felt far and wide.

The agriculture community has, and always has had, a thorough understanding of responsibility. It’s important to maintain this, especially as the Canadian government introduces new changes. From plant breeders’ rights via UPOV 91 to an end-point royalty system, your job is to be informed and proactive about issues that affect farmers.

If you’re at a loss for what those opportunities may be, come check out this fall’s regional meetings.

The new catchphrase is “social licence.” You’ll be hearing that more and more.
AG’S FUTURE IS BIGGER, BETTER, BRIGHTER

Editor,

Many of us went through a really tough time as grain and land prices rose dramatically from the late ‘70s and then grain prices crashed in the mid-‘80s. People had capitalized the higher grain prices into their land purchases and cash rents, similar to what we see today.

Cash payments from governments, changes to the Western Grain Stabilization Program (WGSP), the need for revenue insurance and many other ideas were floated. At that time, we did see a shift from the five-year average under the WGSP to an annual Gross Revenue Insurance Program, and we saw creditors like Farm Credit Canada create a “commodity price” loan where your loan principal could increase or decrease based on commodity prices.

At the end of the day, most of those quick fixes did not work out and all were discarded for various reasons.

We did lose a number of farmers who were overextended and couldn’t hold on until prices returned to normal. But we also saw many young farmers persevere through either extending loan payments or downsizing. Many of them came through stronger and smarter and knowing that everything does move in cycles.

Some of you may be in this situation, given where yields and prices have gone over the past little while. Some of you will need to tighten your belt to get through, others may need to restructure somehow. But this too shall pass, and the long-term outlook is still better than ever for those of us in primary agriculture!

Richard Phillips,  
Canada Grains Council president  
Winnipeg, MB

YOUR INTEGRITY IS ON THE LINE WHEN MARKETING

Editor,

As we finish up this year’s harvest—and now have a chance to read GrainsWest—it is natural for all of us to either feel satisfied with the past production season or, if we have had timing and weather issues, we could be very relieved to be done for another year.

And now it’s on to marketing and planning to get value for this crop. From my experience, the best idea is to not delay. This doesn’t mean you have to have it all sold today and out the door tomorrow; it means knowing what you have stored in your bins and making sure the product is storing well. As you sign sale and delivery contracts, make sure your buyer knows exactly the quality they are dealing with so no surprises will surface; they also have to store and sell this production into the market.

Quality control in storage starts when you are filling the bins during harvest. Hopefully you were rigorous with accurate sampling of each truckload being unloaded. Check the bins weekly so if things change, such as the temperature or smell, you can deal with this quickly before the loss of grades or—even worse—an entire bin spoils. As we keep seeing larger bins constructed and the addition of grain bags into the storage mix, these protocols are even more imperative.

Marketing will always be a challenge, but the bottom line is to make sure the crop that you are representing for sale is exactly what you say it is. Your integrity is on the line of being a reputable supplier of products to our Canadian agricultural buyers and, in turn, to our customers around the world.

Richard Stamp  
Enchant, AB

GOOD READ THROUGH AND THROUGH

Editor,

I am enjoying your magazine. The articles are well written and thought provoking. The Grain Game in the Spring 2014 edition was an in-depth look at farming in today’s changing markets and displays a wealth of information. The two-page illustration is very well presented, with a lot of researched information. Well done! I look forward to reading future articles. One possible idea could be The Great White Combine—what’s being done to prevent hail damage? Does it work? Can it be extended? It could become the farmer’s friend.

David A. Harris  
Calgary, AB

We love hearing from our readers and encourage participation in GrainsWest by writing to us. Please limit your submission to 250 words or less. Submissions may be edited for clarity. GrainsWest will also run letters online at grainswest.com.

When submitting, please include name, address and phone number. Email your thoughts to:

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Who Will Speak for Wheat and Barley Farmers?

Farmers could be forgiven for being a bit perplexed by the recent proliferation of farm organizations in Western Canada.

Unless you are immersed in the world of agri-policymaking, you may need a manual to keep up with all the groups and the work they do on your behalf. New provincial wheat and barley commissions have sprung up, along with two national councils—Cereals Canada and the Barley Council of Canada. So, why is this happening?

When the Canadian Wheat Board (CWB) lost its single-desk powers in 2012, the marketing changes were just part of the story. It signalled a fundamental shift in who controls wheat and barley varietal research, market development and policy advocacy.

Not that long ago, farm policy in Western Canada was largely shaped by the CWB and the Prairie wheat pools through their farmer delegate bodies. The Western Canadian Wheat Growers Association (WCWGA), the Western Barley Growers Association (WBGA) and United Grain Growers represented the right; general farm organizations such as Wild Rose Agricultural Producers and the Canadian Federation of Agriculture occupied the middle; and the National Farmers Union (NFU) weighed in from the far left.

The disappearance of the pools and the CWB as voices for farmers has left a void and paved the way for a “new order” in the wheat and barley industry. What the end-state model will look like is still to be determined, but provincial crop commissions and their national organizations are poised to assume much of that responsibility.

Check-off commissions are certainly not new for crops like canola and pulses, but prior to the passage of the Marketing Freedom for Grain Farmers Act, wheat and barley research and market development decisions were dominated by the CWB.

Alberta charted a more independent course by forming the Alberta Barley Commission over 20 years ago. Commissions were also set up to advance winter wheat and soft wheat, and these groups later spearheaded the development of the Alberta Wheat Commission to represent all wheat classes.

What is currently being debated is how all of these groups will collaborate and who will do what.

The provincial commissions, who collect and administer the check-off dollars, will obviously carry a lot of weight and are ultimately accountable to wheat and barley producers. The new national councils, with significant funding from the commissions and industry, will serve as national voices for wheat and barley.

As the commissions and councils become established, existing farm lobby groups are contemplating how they fit in. The Grain Growers of Canada, for example, has established itself as a national voice for grain and oilseed producers in Ottawa, so how does it collaborate with Cereals Canada and the Barley Council? Where do the WCWGA, WBGA, NFU and general farm organizations fit in the new environment, and is there room in the tent for all of them?

Another issue to be tackled is the future of wheat and barley varietal development, and specifically of the Western Grains Research Foundation. It funds a good portion of public breeding through a federal check-off that is set to end in 2017, and has a board of directors representing no less than 18 farm organizations.

Not to be overlooked is the Canada Grains Council, a national body that includes representatives from producer groups, grain companies and processors.

Where we go from here is the obvious question—and one that will be debated during this winter’s farm meeting season and beyond. The good news is that change creates opportunity, and farmers have been given a mandate by their provincial and federal governments to shape the future of the wheat and barley industry—and make history in the process.

Tom Steve is the general manager of the Alberta Wheat Commission.
Working in agriculture can feel like a cross between playing The Game of Life, The Settlers of Catan and The Farming Game (with a little poker thrown in for fun). No matter how well you plan or how good your strategy is, sometimes the cards just don’t go your way.

In The Farming Game, your fortunes can decline in a moment based on picking up a bad “Farmer’s Fate” card, mimicking the trials of real life when the weather turns or the combine breaks down. In comparison, a game like The Settlers of Catan seems more strategy-based to start with, allowing for good planning as you build roads and settlements to key ports and raw materials. But if the dice are against you, even the best strategy won’t win the game.

The good news is that, in real life, multiple strategies are at play—meaning we aren’t always pawns on a chessboard. We are real players with real opportunities. Which means that, if we play our cards right, we can limit risk while also seeking out new prospects. And that’s the best analogy I have for talking about the importance of international trade to Canadian agriculture.

In the past year alone, the Government of Canada has announced two game-changing trade agreements: the Canada–European Union Comprehensive Economic and Trade Agreement and the Canada–Korea Free Trade Agreement. Canada is an active participant in the Trans-Pacific Partnership negotiations while also monitoring the largely stalled World Trade Organization talks and actively engaging in trade discussions with many other nations.

This focused and committed trade agenda is good news for Canadian farmers and for agri-business.

By cementing deals with strong world economies in Europe, Asia and along the Pacific corridor, we are guaranteeing demand for top-quality Canadian agriculture products for years to come. This means a more stable economy, and a better future for all Canadians. It also means countless more jobs in key sectors from agriculture and food service to information technology and medical life sciences.

As Canadians, we are able to manage risk by ensuring there are always markets that want access to our agricultural products, which makes good sense in a board game and even better sense in real life. Our strong trade agenda is also good news in terms of sustainability and social responsibility.

We hear a lot about how Canada is one of the few countries in the world that can produce more food than we will consume. We hear about our responsibility to feed the rest of the world. And of course we know all about the responsibilities we have to our own families and communities.

The reason I’m proud of Canada’s proactive trade agenda is because our foreign policy is balanced around the globe. From Colombia, Morocco and Honduras to Japan, China and the U.S., we are building a sustainable world economy through open trade. Our prerequisite for doing business is not a high GDP, but rather a nation’s openness to build its economy through strong partnerships. In building these relationships, we are working to build a world that allows people in developing regions to be part of a strong and dynamic global economy. And we are also investing in building strong democracies.

As Canadians, we also benefit socially through engaging these nations in building their infrastructure and quality of life. The world really is shrinking, and—although we will continue to celebrate local food—the reality is that sometimes we want to eat nectarines from Costa Rica in December and kiwis from New Zealand in March. It also means that nations we trade with can buy Canadian wheat and barley in the fall and winter, and then turn around and buy from Australia in the spring and summer when Canadian stocks are getting low. It’s just good business.

Lisa Skierka is the general manager of Alberta Barley.
HEALTH CANADA MOVES TO CURB ANTIBIOTIC USE IN LIVESTOCK

HEALTH CANADA’S VETERINARY Drugs Directorate recently announced it is moving to end the use of antibiotics in food animals for growth promotion.

The move comes amid mounting fears in the international community that excessive antibiotic use in livestock could breed deadly, drug-resistant infections in humans.

In collaboration with the Canadian Animal Health Institute, Health Canada plans to remove all growth-promotion claims from “medically-important antimicrobial drugs.” In other words, animal drugs that are similar to or exactly the same as those used in humans. It also hopes to find ways to strengthen veterinary oversight of antibiotics used in food animals.

However, most antibiotics used in livestock feed are for disease prevention and this use will continue to be permitted.

According to Alberta’s chief provincial veterinarian, Gerald Hauer, the change is a good first step, but more work needs to be done to address the issue of antimicrobial resistance.

“Antimicrobial resistance is a complex issue,” he said. “Will this one step solve the problem? No, it won’t, but it is a step in the right direction and it’s part of the puzzle.”

Currently, there is no tracking mechanism in place for the use of antibiotics in livestock, Hauer said, but some members of the livestock industry have done their own research. In some cases, this has led commodity groups to impose their own restrictions on drug use. For example, the Chicken Farmers of Canada prohibited its members from injecting eggs with Ceftiofur, an antibiotic linked to drug-resistant infections in humans.

If progress is to be made, Hauer said, it is important that livestock producers are aware of the risks involved.

“The key is that they understand the issue and they understand the implications of the antibiotics they’re using,” he said. “It’s also hugely important that we have the different stakeholders — so animal owners, government, industry players, the veterinary profession — all working together to ensure that people do understand the issue and do take the right steps to make sure the antibiotics are used wisely.”

DON’T FORGET ABOUT FORAGES

WITH THE PRICES FOR OILSEEDS, cereals and other annual crops steadily rising in recent years, planted acres of these crops have also increased. However, in some cases, these gains have come at the expense of another valuable and often-overlooked agricultural product: forages.

“Forage crops are the backbone of our ruminant livestock industry, as well as our horse industry, and certainly some of our exports industry to other countries,” said Grant Lastiwka, a livestock and forage business specialist with Alberta Agriculture and Rural Development (AARD).

“They are a very versatile and diverse crop that is crucial to the agriculture industry.”

Forage is a term that encompasses a variety of different seeded and native plants that are grown for grazing or to be harvested as a whole crop for feed. Generally, forages are perennials that grow every spring, including alfalfa, clover, fescue and native grasses, but the term also covers annual fodder crops grown for hay and silage.

Forage crops cover more acreage than any other agricultural crop in Canada. In Alberta, AARD estimates the direct economic value created by forages is roughly $1.6 billion annually. It also estimates that forages in the province create $500 million to $2.2 billion of indirect value through erosion control, water regulation, wildlife habitat, recreation, pollination and carbon sequestration.

According to Lastiwka, unless people start recognizing the forage industry’s value, national forage acres will continue to decline.

“One of the things, I think, is simply to make sure it’s understood better,” he said. “We don’t want to lose the ability to function as a world-class forage nation, and that is a concern if we don’t realize the value there.”
HYBRID ADVANTAGE:
NEW RYE VARIETY HOLDS TREMENDOUS
POTENTIAL FOR WESTERN CANADA

IN JULY, CANADA REGISTERED ITS
first hybrid cereal variety for commercial release: Brasetto hybrid fall rye. Although hybrid rye is dominant in Europe, Brasetto is the first variety to make the jump to the Canadian market.

“It’s a producer’s first glimpse of what a hybrid cereal could do for them,” said Agriculture and Agri-Food Canada cereals researcher Jamie Larsen.

Brasetto was produced by Germany’s KWS, the leading rye breeder in the world, and the variety is licensed to Regina pedigreed seed producer FP Genetics for sale in Canada.

One of the reasons rye lends itself to hybridization is that it is an open-pollinated crop, where pollen must travel from one plant to another for fertilization to occur, Larsen said. Wheat and barley, on the other hand, are self-pollinated.

According to University of Saskatchewan rye breeder Brian Fowler, who has worked with several KWS hybrid lines, the sky is the limit for hybrid rye varieties such as Brasetto.

“In terms of production potential, there’s a phenomenal advantage,” he said. “I grew some of them in yield trials and you didn’t even have to weigh the bags to see they yield quite a bit better than anything that we have here in Canada.”

In trials, Brasetto has been 20 to 25 per cent higher yielding than its closest Canadian competitor, Hazlet, Fowler said. And its advantages do not end there. Brasetto and other hybrids are shorter and have stronger straw than open-pollinated varieties, Larsen said. They also produce a more uniform stand and maturity, which could simplify fungicide application timing for growers.

Rye is highly susceptible to ergot, and the disease hampered early efforts to establish hybrid rye in Western Canada, Fowler said. However, field trials on newer hybrid varieties have shown ergot levels that are comparable to conventional rye varieties.

Both Fowler and Larsen indicated that the cold tolerance of the hybrids could be an issue in Western Canada, although the field trials to date have shown winter survival rates similar to those of established open-pollinated lines.

“The reason why the winter survival could be lower is that these lines were originally developed in Germany and they can only select for cold tolerance when they see it,” Larsen said. “Their winters aren’t as severe as they are out here in Western Canada, so they don’t see that.”

This fall, FP Genetics and Paterson Grain have teamed up for a demonstration program to showcase the new variety. Several hybrid rye fields will be planted, and the resulting grain will be tested to determine its suitability for a variety of end uses.

“The reason we did it with Paterson Grain is that we only have a limited quantity of seed this year,” said FP Genetics CEO Rod Merryweather. Given the small seed supply, he explained, the partnership allows FP Genetics to do substantial test milling with Paterson Grain’s valuable customer base.

“So it’s helping to create end-use markets for the sale of the product,” he said.

Merryweather added that the main end-use target for Brasetto is the North American milling market, but it could also be suitable for the distilling and livestock feed markets.

Brasetto will be available to all growers for planting in August of 2015, Merryweather said, and odds are it will not be the last rye hybrid we see in Western Canada.

“KWS has other advanced lines that they’re testing or that are in registration trials now,” he said. “We expect to see improved varieties on a regular basis.”
Alberta Bees Healthy Despite Recent Scientific Report

In June, the Task Force on Systemic Pesticides, a panel of independent scientists, concluded that neonicotinoid pesticides pose a serious threat to biodiversity and the global ecosystem. The scientists also blamed the pesticides for contributing to the mass deaths of bees.

This class of pesticides, also known as neonicos, is believed to have a particularly negative effect on pollinators, such as bees and butterflies. The task force reported that neonicos disorient bees, causing a host of problems with food collection, reproduction and navigation.

In 2012 and 2013, the number of bee deaths in Ontario and Quebec was unusually high, and many labeled neonicos as the main culprit. In response, the Ontario government has sought to restrict the use of neonicos.

However, Alberta has the largest number of bee colonies in the country, and, according to provincial apiculturist Medhat Nasr, there have not been many reported issues with this class of pesticides.

“Through all of our investigations we haven’t really had any reported kills linked to neonicos in the field,” he said. “In the last two or three years we’ve had less than two or three reports and most of the time it is misapplication. So it’s not because of the product, but the applicator did not apply it at the right time.”

Nasr added that Alberta’s overwintering bee losses this year were only 18.5 per cent, a number that is down almost 50 per cent from the period between 2007 and 2010. On the other hand, 58 per cent of Ontario bee colonies did not survive the winter. The Canadian Association of Professional Apiculturists cited several possible causes for the deaths, including poisoning from pesticides, starvation, viruses and weak queens.

Although temporarily banned in Europe, neonicos have been a popular class of agricultural pesticides in Canada for more than a decade. Across the country, neonicotinoid seed treatments currently protect roughly 21 million acres of canola, more than three million acres of corn and another three million acres of soybeans and cereals.

“Neonics, that class of chemistry, has been around for over 10 years as a seed treatment, and if you look at bee health over that same period of time, colony numbers in Canada have increased significantly, including in Ontario and Quebec where the majority of these issues are being reported,” said CropLife Canada’s vice-president, chemistry, Pierre Petelle. “The fact that neonics have become much more popular does not coincide with any sort of bee decline.”

In many cases, neonics replaced older, more toxic pesticides such as organophosphates, Petelle said, which were more persistent in the environment and required extremely careful handling by growers.

Like Nasr, Petelle said that improper application of neonics could easily lead to bee exposure and deaths. As a result, it is important for growers to follow best management practices for protecting pollinators when using insecticide-treated seed. These include minimizing the dust that comes off the planter during seeding by pouring seeds carefully and not shaking out the loose residue from the bottom of the bag into the hopper; being aware of wind direction and the location of nearby hives or pollinator habitats; and controlling flowering weeds in the field before planting so bees are not attracted to the field for foraging. Petelle also recommended using Bayer CropScience’s new Fluency Agent, a seed lubricant that replaces talc or graphite, to reduce dust during planting.

In July, the federal government announced $1 million in funding for the Beekeepers Commission of Alberta to begin a four-year, nationwide surveillance program to track the health of Canadian honeybee colonies. The project will document the nature and severity of diseases, pest organisms and chemical residues in Canadian colonies. Previously, this type of data had only been collected at the regional level.
FUSARIUM MANAGEMENT A COMPLEX ISSUE IN ALBERTA

SLOWLY, BUT SURELY, FUSARIUM graminearum has invaded Alberta fields. The destructive fungus is now firmly established in much of irrigated southern Alberta and cases of fusarium head blight are on the rise in the central and northern parts of the province.

Alberta’s Fusarium Management Plan, which takes a zero-tolerance approach to fusarium graminearum on grain sold for seed, was originally developed to prevent the pathogen from moving into Alberta and to limit its negative impact on Alberta farmers. However, now that fusarium is spreading across the province, some argue the management plan and its zero-tolerance policy are due for an update.

“From a seed grower perspective, the disease is soil-borne and so much more weather dependent than it is dependent on inoculum load in the seed,” said Todd Hyra, SeCan’s business manager for Western Canada. “So you’ve got seed growers who are producing new varieties [but] are unable to sell their seed locally because there are trace levels of fusarium.”

Alberta’s management plan has created an uneven playing field between pedigreed seed growers, who have to test for fusarium, and farmers who use farm-saved seed, Hyra said.

“Right now, seed growers are testing and farm-saved seed users are not necessarily testing,” he said. “So it’s kind of an unfair playing field if you’re asking a seed grower to not sell, and dump all his inventory, and then another individual who is just not testing is able to use their production.”

The Alberta Fusarium Action Committee recently reviewed the Fusarium Management Plan, and changes could be announced soon.

“The sooner they can do that, the better off not necessarily just seed growers, but grain producers in general, will be,” Hyra said. Increasing the tolerated level of fusarium on seed would be a great first step, he added.

In early 2014, a Private Member’s Bill was introduced in the Alberta Legislature advocating the tolerance level be raised to 0.5 per cent. The Bill was referred to the legislature’s Standing Committee on Resource Stewardship which recommended in June that the Bill not proceed in its current form. It also suggested consideration be given to a regional approach that would allow certain areas of the province to deviate from the zero tolerance policy.

In Manitoba and Saskatchewan, where fusarium is widespread, there are no regulations for fusarium on seed, although many growers do test for the pathogen. Instead, both seed growers and grain farmers in these provinces focus on controlling the disease using a variety of best management practices, including seed treatments and fungicide applications, Hyra said.

According to Agriculture and Agri-Food Canada plant pathologist Kelly Turkington, if you farm in an area where fusarium has not been reported or has been reported in very low levels, a fusarium-free seed source is important to prevent introduction of the pathogen. However, once fusarium is established on crop residues, introducing fusarium on seed is irrelevant.

“One time it becomes established on the crop residue, the most important source of disease is not the seed itself,” Turkington said. “It’s the crop residue that’s within your field or your neighbour’s field.”

Throughout Alberta, Turkington said, farmers need to be cognizant of fusarium and the risk factors that allow the fungus to thrive, such as heavy irrigation and any crop rotation without two full years between host crops, which include all small-grain cereals and corn. The canola-cereal-canola-cereal rotation popular among Alberta farmers does not allow enough time for fusarium-infested crop residues to decompose, he added.

For many farmers, the ideal solution would be fusarium-resistant varieties of currently susceptible crops, but the disease has been a tough nut to crack for breeders, Hyra said.

“Every cycle, we’re seeing some improvements, where up until 10 years ago there were no moderately resistant varieties and now we’re seeing a flow of moderately resistant products with good agronomics.”

One variety that has many farmers intrigued is Canterra Seeds’ AC Emerson winter wheat, which is available for planting this fall. AC Emerson is the first wheats variety of any kind to receive a resistant, or “R,” rating for fusarium head blight.

CALGARY GETS BEEF CENTRE

CALGARY WILL BE THE HOME TO a new state-of-the-art facility for the Canadian beef industry, designed to showcase the advantages of Canadian beef to domestic and international customers by January 2015.

The Canadian Beef Centre of Excellence will feature a full commercial kitchen, a meat display case, a classroom and a dining room. Chefs and butchers will be on-hand to provide unique beef experiences.

“It is allowing people to come and see, feel, experience and, at the end of the day, taste, all that is Canadian beef,” said Canada Beef Inc. president Rob Meijer. “It’ll be a true expression of the farm-to-fork Canadian experience.”

The Centre will also offer beef industry education and training, covering topics such as food safety, quality controls and production practices, Meijer said.

The facility is the product of a partnership between Canada Beef Inc. and the federal government.
What’s in Your Glovebox?

As farmers, we all have our “can’t-live-withouts,” and—no surprise—they’re often found in the glovebox. For this issue, we asked Steve Winkler, a grain and oilseed farmer from Indus, AB, to open up his glovebox. Here’s what we found:


What is it?

Each issue, GrainsWest will show you a close-up view of an ag-related image and it’s up to you to correctly identify it. Email your winning answer to contests@grainswest.com for your chance to win a prize, awarded to one randomly selected contest entrant who answered correctly. Then, watch for the next issue, where we will reveal the full image and have a new one to keep you guessing.

Do you have a glovebox that you would like GrainsWest to peek inside? Or a farm image that would make readers say “What is it?” If so, send us the picture and drop us a line: info@grainswest.com

Last Issue’s Image

In July, *GrainsWest* talked to farmers about their marketing endeavours in the first half of 2014 and their plans for the rest of the new crop. Three Hills-area farmer and writer Sarah Weigum asked three Alberta farmers:

How do you plan to market your grain this year?

1 **Brian Ellis**
   Olds, AB

We signed contracts for our malt barley in the spring with Rahr Malting. They are all covered by an Act of God clause so we’re not afraid to sign up a lot of bushels because if it doesn’t pan out it’s no loss.

We haven’t priced canola, but there was positive basis locally so we locked some basis in for November. We signed some futures contracts in the spring for wheat and we haven’t priced any more since. We grow some pedigreed seed so we’re limited in terms of delivery and basis contracts. We use futures options and put options instead of delivery options so we don’t have delivery risk.

We chat with brokers every couple of weeks and the grapevine in the local elevators is good to keep you plugged in. Given the recent market downturn, maybe we should’ve been a touch more aggressive on early marketing. We put up some more storage this year so that offers us some flexibility when carrying crop over.

2 **Dave Bishop**
   Barons, AB

I start pricing grain when I start seeing a profit. I do my own figures on what I spend on fertilizer, chemical, seed and some of the capital costs. I’m not very optimistic right now. Everything’s been going the wrong direction. My guess is in six months the markets will be in the same place as they are now. If anything, they’ll be a little down.

I’ve priced quite a bit of peas and I’ll try to average $6.50 per bushel. I’ve priced about 10 per cent of my wheat and 10 per cent of my canola, but I’m worried about the canola market. I usually hang on to my barley and go into the local feed market with it. Quite often over the holidays, or if the weather gets bad, you can get a premium for it.

I have some wheat and feed barley left over from last year. We’re lucky here because we’re a shorter turnaround for cars to go to the coast, so we’ve had a lot more movement than other areas.

3 **Ray Blanchette**
   Falher, AB

I have 400 tonnes of wheat sold for September and I’m confident that wheat will go off the combine. I regularly talk to the elevator, and lately rail cars have been moving again. I have about 100 tonnes of commercial canola sold, but my Nexera canola is not priced yet.

In the past, I’ve usually sold about half of my anticipated crop in the preceding January to March. With the Nexera, it can be up to 30 bu/ac, because you have 20 that you have to supply and then another 10 under an Act of God clause. The rest is sold in rallies. I get updates from Viterra and Richardson. The Alberta Canola Producers Commission website is good for canola and wheat. If I like the price I might sell 20 to 25 per cent, and then set targets for the rest of it to head towards 50 per cent of the crop. You have to keep your ears open for opportunities as they arise. It’s such a global economy, there’s always a possibility of a rally.

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BY SARAH WEIGUM
Sound research makes for better marketing decisions

By JONATHON DRIEDGER
MARKET MONITOR

As we get into the very tail end of harvest, growers will have followed through on the part of their crop marketing plan that moved what grain was necessary to manage any lack of storage space. The focus for remaining inventories is now on extracting the most value possible, while still meeting any other farm-level constraints such as ongoing cash flow needs.

Ideally, these post-harvest sales have already been mapped out in a marketing plan well in advance, although even then growers may need to shift their strategies based on the size and quality of their harvest, as well as any changes to the markets in general. It’s also not too early to be thinking about the 2015 crop.

It’s important for producers to engage in well-researched analysis for each crop on their farm as they consider their next move. This includes not just incorporating an opinion on the direction of the broader grain markets overall, but also how each individual crop will behave relative to other crops. This dictates what should be sold more aggressively (those with the greatest downside risk or least upside potential), and those with which to be more patient (those that have greater upside potential or less downside risk).

Crops that typically carry the biggest downside risk are those that are holding some premium but where supplies are poised to build. For example, green pea values spent 2013–14 trading at a historically wide premium to yellow peas due to tight supplies, something that carried over into new crop bids through this spring and summer. Pent-up demand created a strong pull for the period immediately off the combine, but a sizeable production increase in 2014 creates the risk of prices pulling back once this initial surge has been satisfied. Flax could be similarly susceptible.

Feed barley may not have a great deal of downside from current bids, but upside is also limited. A huge drop in Prairie production will keep the barley supply/demand table tight, but the large U.S. corn crop is weighing on the entire feed grain complex, particularly when an abundance of other substitutes are also available (including DDGs and feed wheat).

Crops that have shrinking supplies and/or growing demand are in a better position to be relatively stronger over the course of the year. Fewer acres and a reduction from last year’s record yields means a smaller canola crop at the same time that demand will remain strong. A bearish soybean complex provides a headwind, and there is a limit to how much of a premium canola can sustain, but basis levels and movement opportunities should be solid all year.

Wheat futures may not have a great deal of upside in the short term due to comfortable global supplies, but the prospects for better basis levels over the course of the year may also mean that this crop has relatively less downside from a cash market perspective, and some cautious upside optimism for later in the year. This could be the case for higher grades and protein levels in particular.

It should be noted that relative strength doesn’t automatically mean higher absolute prices. But weighting sales to those with better potential helps lead to a higher overall return.

Another consideration is seasonal trends, and those upcoming factors that can shape the outlook for a crop for the next several months. Oilseed markets are sensitive to South American weather through the midwinter. Pulse crops are heavily affected by the Indian winter rabi crop harvested in March and April. Domestic feed grains tend to show some upside in December, and again in early spring during road ban season. Wheat is a crop that sees a harvest somewhere in the world every few months, and so the supply channel is continuously being replenished.

But fundamentals can change and seasonal trends aren’t foolproof. Marketing plans need to respond accordingly. It’s critical that growers continually stay on top of events, and are able to sift through all the market “noise” to drill down to those factors that will actually impact Prairie bids.

It’s not easy to extract the most value possible from the crop in your bin. Markets are uncertain and dynamic. Understanding the resulting impact to each of the crops in your mix, and having a well-researched opinion on how those are likely to affect prices going forward, will go a long way toward helping you make the best decisions possible.

Jonathon Driedger is a senior market analyst with Farmlink Marketing Solutions.
Water, land and people

Canada’s natural resources key to feeding the world

So how do we meet these challenges head on? Education will play an increasingly critical role. Future economic success for Canada, as well as for primary producers and agri-business, will rest to a large degree on how well we capture more value from what is produced. This value is critical if producers are to economically implement the most leading-edge agricultural practices and validate their environmental performance.

Canadian producers have already entered the era of data-driven agriculture, with the use of GPS technologies to improve seeding, chemical use and crop quality. These now-standard practices are evolving to include satellite imagery assessments and the use of optical sensors on unmanned, remote-controlled aerial vehicles to develop detailed prescriptions for fertility and watering in the case of irrigation.

As more data is collected, we’ll have more opportunities to create even more advanced processes and to enhance crop quality and traceability. Already, students in colleges and universities are being exposed to these new technologies—and the emergence of agriculture as a driving demand for these technologies is becoming apparent.

The emerging skill sets necessary to meet the expanded global demand for food and nutrition are likely to be quite different from what we understood farming to be in the past. Career training in advanced plant and animal science will need to be refined and expanded—meeting global demand is likely to require new crops and market-specific foods. Applying high-tech approaches to data-driven agriculture will require a new generation of well-trained practitioners to focus on agriculture and to establish Canada as a leading global supplier of not just safe, high-quality food and nutrition, but of new technologies and practices that can be employed around the world. Advances in environmental science and system-wide approaches to managing land, water and energy will be needed to demonstrate the highest levels of environmental performance in food production.

The business side of agriculture will be very dynamic, with significant new value-added agri-business opportunities. There is a critical need to train people to pursue agricultural opportunities in international business in order to expand our skills in competitive market intelligence that will lead to investments in value-added agricultural production and new market access. The global demands for food and nutrition will require individuals skilled not only in the best business practices, but in diplomacy and the ability to forge strong and lasting relationships and partnerships.

Already, leading academic institutions in Alberta and elsewhere are embarking on activities to ensure that students at their institutions will be well placed to be actors in this brave new world of agriculture. Integrated programming, in concert with industrial partners, is being enhanced and new streams are being developed. Now it’s time to ramp up recruitment.

David Hill is the director of centres and institutes and research advocacy at the University of Lethbridge. He has more than 40 years’ experience in natural resource management in water and agriculture, is a past president of the Canadian National Committee for Irrigation and Drainage, and a past member of the Rosenberg International Forum on Water Policy.
Person: Ryan Dodd, elevator operations manager, Canada Malting Co.
Place: Based out of Niobe, AB, but often in the truck roaming the highways and byways of Canada’s Prairies.
Thing: Managing 10 elevators across three provinces, his own mixed farm and still having time to spend with family and friends.
Good to the last drop

Inside the life of a malting barley elevator boss

YOU’D THINK BEING THE CANADIAN ELEVATOR OPERATIONS MANAGER FOR the Canada Malting Company—with responsibilities stretching from Alberta to Manitoba—would be enough to keep a man busy. But not for Ryan Dodd.

When he’s not meeting brewers or overseeing operations at one of 10 grain elevators, Dodd can usually be found on his family farm, tending to 300 acres of grain and raising around 130 head of cattle.

Dodd, 37, has spent his career in the elevator industry, working for Louis Dreyfus Commodities and Viterra before joining Canada Malting 12 years ago. He got his start in the grain business with the Alberta Wheat Pool, which recruited him just a week after he graduated from high school.

“They phoned me and asked me one day if I’d have any interest to come over and help them load rail cars, and I never ever looked back,” he said.

GrainsWest: What has changed in malt agronomy since you began your career?

Dodd: Varieties have really changed. You went from Harrington to Metcalfe, then Copeland. Now you’re seeing Newdale, Bentley, Synergy—all these newer varieties that are higher yielding. They’re built for a lower protein, and people are able to put more nitrogen into the field. You see guys putting more money into herbicides and some of the top fungicides in the business, trying to get the best quality out of the barley.

Nowadays, we’re seeing so much more wet weather and people really have to fight against disease. Manitoba has been hit badly because of fusarium. It has to do with their climate and soil conditions.

GW: What are some of the big changes you’re seeing when it comes to malt barley marketing?

Dodd: The loss of the Canadian Wheat Board was huge—not only for farmers, but for the industry. It has been a challenge for some that aren’t quite up to the market speed, say, with cellphones or the Internet or anything like that. But then, other guys have been very successful with production contracts and private contracts with domestic maltsters.

For us maltsters, having to manage all our own contracts and purchases has been a really big change. There’s a lot more paperwork, and you’ve got guys [who]—instead of coming in and selling big lots of barley—are selling one B-train load here, one B-train load there. It’s been a big change for us.

GW: You manage 10 elevator operations—what does that entail?

Dodd: We have grain elevators across the Prairies, and what I do is help each
elevator—whether it’s with marketing, pricing, contracting, farmer visits, as well as everything down to maintenance and capital investment into our facilities—making sure they’re all working top-notch. Then there’s personnel management as well. We’ve got 29 employees across the Prairies, so there is always something going on with staff.

I travel around to all the elevators, and I try to get to the eastern guys quarterly, so it’s a lot of travel out to Mariapolis, MB, and Norman, MB. Usually, I drive around in a truck and stop at a local coffee shop, and have a chat with the farmer there. I’m always carrying tools, a new motor or whatever. Last year I put about 75,000 kilometres on the truck.

GW: Who are the big buyers of malt and what can Canadian farmers do to satisfy this demand?
Dodd: For the Canadian operations, Canada Malting, Rahr Malting, Cargill and Richardson are some of the largest players. One of the things I’d tell guys is to know your quality specs, take very good samples, and retain those samples for future re-checks and stuff like that. Too many guys just put it in the bin, grab a scoopful, and think that’s going to be their sample. And that’s not it—you have to have a continuous good sample. That way you’re protected if they come back and ask you later why your barley is something different than when you delivered your sample.

GW: A lot of barley goes into brewing beer. How particular are brewers about the barley they get? What effect can the barley have on the final beer?
Dodd: Quality is the No. 1 concern for the brewing industry. It’s the taste, the speed of the process, the colour of the beer, the clarity of the beer—it can all be affected, one variety to the other. Brewers have a really good eye and they run a lot of tests, so they pay well for the product, but they want good product in return.

GW: Are the smaller craft brewers more demanding?
Dodd: I don’t deal a whole lot with the guys in the craft brewing industry, but I would say they are not quite as demanding on the quality as an Anheuser-Busch. Those guys are very, very top-notch when it comes to quality. But if a microbrewery doesn’t get a product they like, they’re probably not going to come back and deal with you again.

GW: What are the best and worst parts about your job?
Dodd: I would say probably the worst part is the declining barley acres and watching the industry go down. It’s making our jobs a little more difficult. We have to go out and show farmers good returns in the barley market in order to get them to grow barley.

Probably the best thing is the excitement in the craft brewing industry and the demand in barley from them. It’s really picked up and helped out a lot in terms of getting more demand for malt.

GW: How can farmers get into the barley game?
Dodd: The best thing is to call one of our grain elevators, which are located across the Prairies, and ask them about varieties they are looking for. You need to grow something that has a demand in the malting market. We know what varieties work better in certain areas, as well as what kind producers need, so you can grow that instead of a niche variety.

We also attend trade shows. Guys come around and look at our production contracts, which give us first right of refusal on the barley. They’re growing for us, but there is also a competitive clause in the contract that says if we’re not competitive, then we have to either match or let the guy out of the contract. So it’s sort of a no-risk situation for the producer, and they have a home for their barley if it turns out to be a huge crop.

CROP SCOUT: Ryan Dodd has been a mainstay at Canada Malt for more than a decade and now runs more than 10 elevators, as well as his own mixed farm in central Alberta.
High-tech at Harvest

By PETER GREDIG

TECH@WORK

High-tech at Harvest

Technologies and Tools That make you safer, more efficient and more productive during harvest time offer big benefits and quick payback. The following suggestions are not about iron and horsepower—they’re your top picks for electronics and software. The brands referred to in the following list of suggestions are provided as examples. Do your own research to find the products that best meet your needs and budget.

Equipment-mounted Cameras

It’s a relatively small-ticket item, but heavy-duty remote cameras have proven very beneficial in many harvest scenarios. Being able to see behind the combine, into the grain tank or the view from the grain cart auger—it’s really up to you where to position the cameras. Think about how much time and effort you would save over the harvest if a camera helped you back the truck up to the unloading auger perfectly every time. AgCam (www.dakotamicro.com/agcam) is one brand, but there are others.

Wireless Grain Cart Scales

Many grain carts are equipped with scales, but now it’s possible to have a system that pushes load data wirelessly to your desktop computer, mobile phone, tablet or the cloud.

Agrimatics (www.agrimatics.com/app) offers an aftermarket kit that utilizes existing scale load cells and links to your iPhone or iPad via the cloud. The software keeps track of all crop that goes through the cart, and can even create a GPS coordinate for each load to help track what inventory came from where. No more notebooks, flash drives or printers to slow you down.

Cart manufacturers like Unverferth are also offering new data management technology that can work through your ISO terminal or touch screen tablet. Unverferth’s UHarvest (www.uharvest.net) software can link wirelessly to the cloud if you have an account with Raven Industries’ Slingshot (www.ravenslingshot.com) data management service.

There are numerous other options, but the primary message is that, finally, wireless data collection, storage, organization and sharing are becoming easier and more efficient.

Grain Dryer Monitors

More and more crop producers are running grain through their own dryers and this can be a show stopper if the dryer is not functioning properly. A number of dryer manufacturers are now offering mobile apps or web-based monitoring technology. Dryer Master (www.dryermaстер.com) allows users to view and change the settings on their DM510 drying control systems via the web browser on their smartphone, tablet or desktop. This system can also be retrofitted to work on older dryers. Eliminating the need to have someone on hand at the dryer at all times is a huge benefit and will provide savings.

Grain Bin Monitors

For grain already in storage, the priority is to make sure it doesn’t heat up or spoil. With Bin-Sense (www.intragrain.com), a wireless bin monitoring system, information generated by in-bin moisture sensors is sent to a website over cellular networks. The password-protected data can be viewed from any device with an Internet connection. If a hotspot is detected, you’ll be alerted by a text message or email so you can take action to prevent spoilage. The system is solar powered and can be used with some existing temperature sensors and cables.

Grain Inventory Management

Keeping track of what grain is stored where, and whether it’s sold, forward contracted, on basis or available to sell is very difficult when under the gun at harvest time. Grain Storage Manager, a free mobile app for Apple and Android devices, allows you to create virtual bins and yards, and to track crop loaded in and out. It converts wet to dry weight and accounts for shrinkage. The visual display allows you to see at a glance how full or empty each bin is. The app also allows you to export all data to a spreadsheet via email, but it does not keep track of marketing information.

Farm Credit Canada’s Field Manager Pro recordkeeping software has a mobile app for Apple and Android. It lets you enter the relevant information via your smartphone when you harvest or sell crop, and adjusts your inventory accordingly. The app integrates with the desktop version of the software so you don’t have to enter the information twice. Go to www.fcc-fac.ca and click on “Tools & Resources” to learn more.

Peter Gredig is a corn, soybean and wheat producer near St. Thomas, ON. He is also a partner in AgNition Inc., a Guelph-based mobile development company focused on building agriculture apps and solutions.
HOSE PAILS IN BIN DOORS ACROSS THE PRAIRIES hold a lot of power. A single harvest sample can help an individual farmer negotiate price and delivery for his grain, but gather enough of those samples and the impact goes far beyond the farm gate or country elevator.

The Harvest Sample Program (HSP) run by the Canadian Grain Commission (CGC) and the Harvest Assessment Program operated by the Canadian International Grains Institute (Cigi) are paid for in part by farmers through fees and check-off dollars. In turn, these initiatives give farmers an objective assessment of their product, help market Canadian crops worldwide and can even nudge grading factors.

If you’ve ever questioned the grade your grain received at the local elevator, then consider the Harvest Sample Program (HSP) a second opinion. Producers can submit samples of grains and oilseeds to this voluntary program and receive an unofficial CGC grade, a breakdown of degrading factors, and a quality analysis that includes protein content of cereals and pulses, and oil and protein content of canola, flax, mustard and soybeans. This third-party assessment may provide producers with leverage when selling their grain.

Linda Schmidt grows wheat, barley, peas and canola near Manning, AB. With much of the grain from her farm being sold by producer car, it is important for her to know the grade and...
quality to prevent disputes with the buyer.

“We like to know as we’re combining along what grades we’ve got so we can price grain,” said Schmidt.

The deadline for submitting samples this year is Nov. 1. The sooner samples are submitted, however, the sooner farmers can receive their results—whether by phone, email or visiting the CGC’s booth at fall farm shows like Agri-Trade in Red Deer.

Schmidt appreciates the simplicity of the process.

“They send you everything you need,” she said, referring to the HSP package. “Postage is paid. You’re sampling anyway so you might as well use it.” While there are no additional costs for producers to use the HSP, farmers do pay an average CGC fee of $1.82 per metric tonne for grain shipped to Canadian ports.

According to Twylla McKendry, the CGC’s program manager for analytical services, the CGC sent out more than 26,000 sample packages in 2013 and had about 10,000 of them returned in the fall. While each program participant is limited to eight sample bags, there are no restrictions on the types of grains or oilseeds submitted. Whether it’s a variety of crops or eight different lots of hard red spring wheat represented in the samples, it is important that each bag is labelled with the class and variety name, the growing region, and the producer’s own identifier such as bin number or land location.

It only takes a couple minutes for inspectors and technicians at the CGC lab to grade and analyze a sample, but that’s just the beginning of the process for McKendry and her staff. They combine individual samples of similar grade from 10 growing regions to give buyers an idea of the average protein and quality in a specific area of the Prairies.

Composite samples of wheat of the same grade and protein are milled and baked to give further technical information on the performance of wheat in the form of flour, dough, bread and noodles. Pulses and oilseeds are also tested for specific quality parameters. Because samples are identified by variety, the CGC can also compare quality and performance by variety.

The samples help the CGC ensure that its grading factors reflect the current science and reality of grain conditions. Research on the effect of mycotoxins recently prompted a change to the ergot tolerance for most classes of wheat in Western Canada from 0.01 or 0.02 per cent to 0.04 per cent, meaning more grain can be delivered into higher classes while still maintaining food safety.

“We research the effect that grading factors have on quality, and the data generated provides us with the science to revise the grading factor tolerances to benefit producers,” said McKendry. She explained that the CGC is also researching a way to precisely determine chlorophyll content (green seed count). “Right now, the seed has to be crushed. We’re looking at ways to do that with an instrument so it’s not as subjective.”

As harvest rolls on across the Prairies and the CGC starts to amass samples directly from producers, Cigi also receives representative samples of each class and grade of wheat from grain handling companies.

Analyzing the wheat crop is a top priority in the fall. By November, Cigi staff, CGC staff and farmers depart for Asia, Europe, South America and Africa to talk to major buyers about the attributes of the year’s wheat crop.

Since each importing country generally buys wheat from a specific region of Canada, Cigi groups samples by region and soil type. A grain analysis looks at factors like bushel and thousand-kernel weight, protein, moisture and degrading factors. Cigi staff then mill the wheat to assess flour yield. The flour is further processed into bread and noodles. Over 20 tests measure factors that matter to millers and bakers—from flour colour and spaghetti strength to bread baking time and the distance a ball of dough can be stretched before it breaks.

Rex Newkirk, vice-president of research and innovation at Cigi, explained the two-fold objective of Cigi’s harvest assessment.

“One of the objectives is to provide analysis back to specific grain companies on the samples from their regions. This gives information they can use in their buying decisions,” said Newkirk. The other objective is to give international buyers the “best representation, from a commercial perspective, of what’s coming out of each region.”
As well as taking information to buyers, Cigi conveys feedback from buyers to Canadian industry participants. For example, if gluten strength is inconsistent, staff at the Cigi lab will try to determine if the cause is varietal or environmental. If buyers want a different class of wheat, Cigi will request Canadian grain handlers include those samples in the harvest assessment program.

For most of its 40-year history as the technical arm of the Canadian grain industry, Cigi worked on behalf of the Canadian Wheat Board and was “kind of lost in the mix,” said Newkirk. As the CWB monopoly ended and new wheat associations were developing, Cigi recognized a gap in the international marketing of Canadian wheat and took the lead on trade missions.

“We had to take a very proactive role to make sure nothing fell through the cracks as the new organizations were forming,” said Newkirk.

He sees the provincial wheat commissions and Cereals Canada taking a larger role in trade missions promoting Canadian wheat in the future, but explained that marketing the Canadian crop won’t likely be the sole purview of private grain handlers.

“When buyers are buying, they look at a number of suppliers. Grain companies can’t invest a lot of money and time in an area where their competition might get the sale,” said Newkirk. He added that trade missions representing the entire Canadian crop are more efficient, bringing all the major buyers to one seminar in each region.

Keith Bruch, vice-president of operations at Paterson GlobalFoods, credits Cigi for building strong relationships with international grain buyers.

“Cigi, being an impartial entity commercially speaking, can really play a role in increasing the Canadian brand vis-a-vis other origins,” explained Bruch. “They’re well known, well respected, and really the only general source of information on the Canadian crop.”

As Bruch points out, U.S. Wheat Associates, with 17 global offices, provides stiff competition for the Canadian crop.

“Canada needs to do at least as good a job or better to make sure that Canadian varieties have their place in the market.”

The co-ordinated effort to market Canadian grains and oilseeds is a top priority for JoAnne Buth, Cigi’s new CEO.

“There needs to be really strong collaboration throughout the industry and that needs to start with the producers and go all the way to the international buyers,” explained Buth, who came to Cigi from the Canadian Senate where she represented Manitoba for two-and-a-half years. Before serving in the Senate, Buth had a varied career in agriculture,

Harvest sample tests run by organizations such as Cigi and the Canadian Grain Commission can be a valuable tool for farmers who want to gain the upper hand when they market their grain.
working for the Canola Council of Canada (vice-president and president), Manitoba Agriculture, Agriculture and Agri-Food Canada, and DowElanco (now Dow AgroSciences). Throughout her professional life, Buth said farmers have been her top priority.

“When I was VP of crop production at the Canola Council, I always said, ‘it has to go back to the grower,’ because they’re making the choice of what to grow,” said Buth. “I think it’s important that Cigi continues to focus on growers and bringing the value of the Canadian crop to growers.”

Buth believes that by working with other organizations that promote agriculture to Canadians, Cigi can help showcase the value of Canadian crops not only to buyers around the world, but to fellow Canadians.

“Canadians need to understand how important agriculture is to the economy,” said Buth. “I think there’s a role for Cigi to provide good information on where Canadian products go in the world.”

For every tonne of wheat sold to a CGC-licensed company, $0.15 goes to Cigi. Buth encourages farmers to attend Cigi’s Combine to Customer programs to see how their check-off funds are used. This three-day seminar runs several times each winter and allows farmers to see Cigi in action and learn about what matters to international buyers.
Where the Wheat Meets the Water

POSTCARD FROM THE PORT:
Port Metro Vancouver’s 28 major marine cargo terminals include six grain facilities, five of which are located in Burrard Inlet, pictured here.
Port Metro Vancouver and the future of west coast grain exports

BY IAN DOIG • PHOTOGRAPHY COURTESY OF PORT METRO VANCOUVER

An ever-changing array of bulk cargo and container ships frequents Port Metro Vancouver (PMV). Though the temperate maritime trade destination handles much of Canada’s import–export traffic, the average Canadian barely knows it exists.

A defining feature of Vancouver’s geography, the sprawling port features 640 kilometres of shoreline. Extending from the Canada–U.S. border to Burrard Inlet and Indian Arm, it encompasses the lower Fraser and Pitt rivers as far as the Fraser Valley.

It is a pivotal cog in Canada’s economic engine, handling 19 per cent of the country’s total trade by value. North America’s largest exporting port (by tonnage), it’s also Canada’s biggest and most diversified—transporting containers, automobiles, and bulk and break-bulk cargo, as well as servicing cruise ships.

With 28 major marine cargo terminals and three Class I railroads used by CN Rail and CP Rail, an incredible $184 billion worth of goods traverses the port annually. Incoming ships offload containers of everything from consumer electronics to clothing into storage yards, from which 70 per cent are transported inland by train and the balance by truck. Bulk exports range from container-loaded (break-bulk) commodities such as lumber, steel and machinery to pourable commodities (bulk) such as coal and grain, which are conveyed in ships’ holds.

In 2013, the port’s five grain-handling terminals in the Burrard Inlet inner harbour, and a sixth located on the Fraser River, handled 16.1 million outgoing tonnes of grain. The port is better known to Prairie farmers than to most Canadians. However, PMV senior account representative for trade development, Doug Mills, said producers visiting the port are typically surprised by its size and scope.

“What I hear from the farmers when they come here is, ‘We had no idea it was this big, this vast,’” he said.

The scope of the port’s daily reality came into focus during the 2013–14 transportation crunch that followed the 2013 harvest, bringing the operations of Canada’s ports into the spotlight.

The PORT AND THE CRUNCH

The railways absorbed the bulk of farmer frustration as grain movement slowed during the winter of 2013–14, but the spectacle of empty ships queued at PMV awaiting grain shipments raised questions about the port authority’s part in the bottleneck.

Mark Hemmes is president of Quorum Corporation, which is contracted by Transport Canada and Agriculture and Agri-Food Canada to monitor the Western Canadian grain handling system.

“I would be very much in disagreement with anybody who is blaming the port authorities,” he said. The blame, he said, lies squarely with five weeks of the worst winter weather in living memory, bringing rail traffic to a standstill. Grain company sales orders made in late November and early December for ships arriving in Vancouver at the end of January could not be stopped. As rail movement slowed, all parties were forced to wait out the weather. A pileup of as many as 34 vessels, each with 40,000 to 50,000 tonnes of vacant hold space, waited at PMV and the Port of Prince Rupert.

Both ports, in conjunction with the Chamber of Shipping of British Columbia, went above and beyond the call in coping, reported Hemmes. As mooring space dwindled, more anchorages were created off Vancouver Island so ships would not be turned away.

Meanwhile, in Eastern Canada, Lake Superior had frozen solid for the first time since the 1930s, shutting down outgoing Port of Thunder Bay grain shipments almost a week-and-a-half earlier than usual. The port subsequently had its latest opening ever on April 23.

When the weather cleared, it was not merely business as usual.

“The railways were right on the money. Starting at mid-April and until today, we’ve been breaking records in the volume that we’ve been setting,” said Hemmes, who added that it will long be argued whether or not federal legislation prompted the railways to turn the situation around. “But the fact is, they did perform.”

Whereas in a typical year PMV will move between 16 and 17 million tonnes, it is likely to move 19 million tonnes this year, and growth in West Coast volume is the continuing trend.

“It’s all good,” Hemmes said. “In April, it was doom and gloom. Now, we’ve got a system that seems to be working.”

Hemmes explained that, while it’s a passable assumption that the grain export system strengthened itself as a result of the crisis, it was already robust.

Thresholds imposed by federal legislation during the crisis pushed the railways to use the most efficient origins and corridors that allow them to meet volume commitments, which are not necessarily where the most lucrative markets are, said Hemmes. He cited the U.S. as an example, saying one can understand why railways would be reticent to put equipment into a corridor where the car cycle is half as productive as it is on the West Coast or in Thunder Bay.

Hemmes said he hopes that, in the coming months, grain companies and
the railways can find a balance to meet the demands of the markets they serve.

“The capability of the West Coast terminals has always been there,” he said. “When push comes to shove, they always perform.”

Issues at the ports are also affected by outside factors. Mills suggested that independent business decisions made along the supply chain can negatively impact its efficiency. For instance, the cost of chartering vessels is at a record low, as are daily demurrage charges imposed on idle ships. Six years ago, demurrage might have totalled up to $75,000 per day, but it is now between $7,000 and $10,000. While this may provide grain companies more logistical flexibility, it may also encourage lineups as ships are secured to ensure their availability.

When anchorage space is clogged with empty vessels awaiting grain, other commodity movers incur greater costs in securing moorage elsewhere up the coast. Mills suggested supply-chain stakeholders might work more closely to increase efficiencies and ensure timelier, predictable grain movement.

“With that larger perspective, we can grow the pie as opposed to trying to grow our piece of the pie,” he explained.

Such co-operative interaction is a hallmark of the port authority’s operations. Contrary to popular perception, labour disruptions involving the 15 unions represented at the port are rare. And when striking non-union truckers working at the port’s container terminal brought PMV operations to a standstill, the port helped launch a 14-point action plan that resulted in an end to the work stoppage.

The port has also worked collectively with the Chamber of Shipping of British Columbia, the British Columbia Maritime Employers Association, the Grain Workers Union and Transport Canada to create a set of regulations that allows grain to be loaded in wet weather. Previously, rain delay caused an annual 20 per cent loss in handling efficiency.

“That’s a web of activities that all can have significant impacts on the overall community,” said Mills. “We try to initiate dialogue to create awareness around those issues and create interest in resolving them.”

THE GATEWAY INITIATIVE
Answering to the federal minister of transportation, the Vancouver Fraser Port Authority’s duty is largely to ensure the assets it owns and manages run efficiently and safely, and to act as a landlord to its tenants. Notably, it has decision-making autonomy over its operations; this includes borrowing and accumulating funds for the purpose of maintaining its mandate. Under the Marine Act, the federal government cannot pay for port infrastructure.

What the port authority doesn’t do is directly touch the supply chain, leaving the handling of goods to independent terminal operators. However, the port authority involves itself when issues such as anchorage usage and supply backups arise within its jurisdiction.

“We have in the past become engaged, when necessary, to ensure that we work toward the most efficient reality possible,” explained Mills. “Sometimes, it’s more complicated than other times,” he added, directing a piece of well-aimed understatement at the massive, ongoing, federal Asia–Pacific Gateway and Corridor Initiative (APGCI) spearheaded by the port.

Roughly 10 years ago, PMV began to extend its planning window to better accommodate the time it takes to secure investment dollars for large infrastructure projects and to physically complete them. The port initiated a series of studies forecasting its growth needs decades into the future. It also took the lead in engaging the British Columbia and federal governments, as well as supply-chain stakeholders, in identifying and accommodating trade opportunities and creating an agreement to collectively fund necessary infrastructure.

This process produced the APGCI, under which the port is undergoing a long-term upgrade with the goal of making the country’s West Coast import–export network the top trade link between Asia and North America. Much of the program
is centred on PMV, but also includes upgrades to the Port of Prince Rupert, as well as road and rail connections across Western Canada and into the U.S.

Committed, collective investment in APGCI infrastructure by the federal, British Columbia and Vancouver governments, as well as the port, its stakeholders, its corporate tenants and the railways, is approximately $9 billion. For perspective, almost 50 per cent more is being spent on APGCI projects than on current expansion of the Panama Canal.

The scale of the program and the fact that the port is located on the edge of Canada’s third-largest city makes planning and development a complex challenge. In carrying out its projects, PMV must work with the 16 municipalities and several First Nations whose territories it borders, as well as minding several ecological preserves. Development requires community engagement processes that can take much longer to complete than in other global jurisdictions, as well as competition with real estate developers for land acquisition.

Aiding the planning process, the port’s land-use guidelines were simplified following the amalgamation of three separate port authorities in 2008. The port authority uses the Port Metro Vancouver Land Use Plan as its central policy and planning guide. Within it, the port has systematically taken stock of all its properties and regions, cataloguing the most opportune use for each.

The network of projects to be completed within the port’s jurisdiction over the coming 10 years includes the building of new highways, overpasses and bridges that will increase road and rail capacity. Decoupling road and rail interchanges will create maximum fluidity and thus boost the port’s capacity and speed of movement. A number of these improvements had already been implemented prior to the fall of 2014.

Initiatives also include an extensive $2-billion enhancement of the Roberts Bank Rail Corridor in Delta, British Columbia, the country’s largest container port.

Mills said these investments spurred industry to recognize the growth potential involved, and major terminal expansions by tenants—including agricultural corporations—followed. “They’re all looking at increasing either efficiencies and/or structural capacity to increase their access to the market,” he explained.

MAXIMIZING EFFICIENCY AND OPPORTUNITY

Viterra, whose Prairie grain co-operative predecessors have maintained PMV facilities since the 1920s, moves approximately two million tonnes of oilseed and pulse crops through Pacific terminals. It will triple this number to six million tonnes once APGCI upgrades to its Burrard Inlet terminal are complete, in order to keep up with steadily rising Western Canada harvest numbers.

PORT METRO VANCOUVER AT A GLANCE

- Thirty-five years after Captain George Vancouver explored Burrard Inlet and reported to England its ideal location as a deep-water port, Hudson’s Bay Company established Fort Langley, where it began the export of salted salmon to other Pacific destinations.

- Canada now has four grain-handling maritime ports. On the West Coast, Port Metro Vancouver (PMV) ships an average of 14.6 million metric tonnes per annum (MMTPA), while the Port of Prince Rupert moves 4.6 MMTPA. In Eastern Canada, the Port of Thunder Bay moves 5.9 MMTPA, and 0.5 MMTPA is transported through the Port of Churchill.

- Approximately 99,000 Canadian jobs are linked to PMV activity. Generating $20.3 billion in economic output annually, the port contributes $9.7 billion to the country’s annual GDP while contributing $1.6 billion in tax revenue to three levels of government.

- PMV trades $172 billion in goods with 160-plus trading economies annually.
“We’re taking a longer-term view of changes in cropping patterns in Western Canada,” said president and CEO Kyle Jeworski. “It’s important that we ensure we’ve got the infrastructure to stay ahead of those production growths.”

Jeworski added that the proposed $100-million-plus modernization project will enhance processing procedures. Though its Pacific terminal in Vancouver can move wheat, Jeworski said specializing between port facilities drives efficiency. Viterra is currently committed to moving pulses, including red lentils and yellow and green peas, through its Pacific terminal.

“It’s important to understand the complexity of all the different products that are handled on a daily basis, which requires a tremendous amount of co-ordination between our inland country assets and our port facilities,” he said.

Viterra also ships barley through its West Coast port facilities in Vancouver and Prince Rupert, and wheat through all of its port facilities.

Mindful of shifting farmer demands and evolving crop patterns, Viterra’s system upgrades include two new high-throughput inland grain-handling facilities at Kindersley, SK, and Grimshaw, AB.

With Viterra shipping multiple grades of multiple products, Jeworski said it’s also critical to maximize efficiency through seamless co-operation with CP Rail, the company’s main carrier.

“We need to be in tune with changes in the rail system—that’s larger train sizes and faster loading speed. How do we continue to support efficient movement of commodities from inland to port?”

Richardson International is similarly doubling the size and capacity of its North Vancouver terminal. This grain handler moves the largest volume, which includes barley, lentils, canola, peas and all classes of wheat, turning over its terminal capacity 53 times a year.

“The drive is to have just-in-time inventory to facilitate the quick loading of vessels,” said Phil Hulina, regional manager in charge of the facility, adding that Richardson will handle “pretty much every commodity grown in Western Canada.”

Hulina explained that his company and its fellow handlers struggle with the movement of grain and push for better fluidity more in sync with vessels.

“We were all challenged this year, though we are operating at a record pace,” he said. “We are getting a lot of commodity delivered to us.

“It’s a very exciting time,” he added. “We’re going to see increased harvests, so there are going to be more opportunities for sales offshore.”

In addition to pushing its capacity, Richardson also has a 25 per cent stake in Cascadia, Viterra’s main shipping terminal, and will also acquire a Viterra terminal in Thunder Bay to bolster operations in Eastern Canada.

Echoing Jeworski and Hulina, Mills said planning for the future is a constant as PMV grows and evolves to maximize benefits to users, including economies of scale. Because it encompasses so much activity, competition is present within the supply chain and its supporting services. Shipping companies compete, as do the three key rail lines that service the port, tug operators, fuel suppliers, ship husbandry services and more.

“Other jurisdictions often are much more expensive because they don’t have to compete for that business,” explained Mills. “Here, they do. So, it’s a benefit to move goods through this gateway.”
After decades in decline, prairie grain elevators are experiencing a development revival. Over the past two years, every major player in Canadian grain marketing and transportation has announced significant investments in building and expanding rail and storage capacity at their country grain elevators.

The new construction represents hundreds of millions of dollars of investment in infrastructure, and will help address capacity issues in the grain supply chain by increasing one-time storage capacity in Western Canada by more than 450,000 metric tonnes, and doubling rail car loading capacity.

James Mowbray, vice-president, commercial manager, for Cargill AgHorizons Canada, says the sudden growth has been triggered by a combination of factors, including changes to the grain marketing system in Western Canada and a push for greater efficiency in the rail system.

“When the Canadian Wheat Board (CWB) was involved as a single-desk marketer, they controlled the pull of grain from the farmer. In an open market, grain can come into the system at any time,” explained Mowbray. “Our customers expect us to provide service in a timely and efficient manner, and that we’ll have a good amount of storage and transportation under what they bring in.

“At the same time, there’s greater competitiveness with the railways for different industries moving different cargo. Rail companies want to get more efficient and productive, and move larger trains,” he added.

Cargill is focusing its investments on expansion and upgrades of existing facilities rather than new builds, with an emphasis on increasing automation and efficiency to help farmers unload and move grain into rail cars as quickly as possible.

“We don’t believe there’s a physical asset capacity constraint; our challenge is to move product consistently over the
12-month cycle,” said Mowbray.

Not all competitors are taking the same approach. In 2014, Viterra announced three new high-throughput terminals in Grimshaw, AB, Kindersley, SK and Ste. Agathe, MB, as well as upgrades to grain terminals at White Star, Humboldt, Waldron and Ituna in Saskatchewan, and Grassly Lake in Alberta. Viterra also recently completed similar expansions at Gull Lake and Fairlight, SK. Facility upgrades alone will add 170,000 tonnes of storage capacity to the system.

“We’ve been very active. The inland and port expansion goes hand-in-hand,” said Kyle Jeworski, president and CEO for Viterra in North America, referring to a $100-million upgrade at Viterra’s Pacific terminal. “You can’t just expand inland and have no place to go with it. The port upgrade allows us to maintain balance.”

The new builds will incorporate the latest automation technology, which Jeworski said will provide unrivalled receiving and loading capabilities. In his words, this will “add velocity, reduce cycle times and increase car capacity.”

“We have a lot of history in running facilities, and we know where to tweak to increase efficiency,” he explained. “We won’t stand still. There have been so many changes in the industry in the last three to five years, and we need to continue to evaluate and adjust to support our farmer and end-use customers.”

Parrish and Heimbecker, Limited is also making significant investments to secure its market share. The company’s new elevator at Hanover Junction, just west of Biggar, SK, will be open in time for the 2014 harvest, and another new elevator is under construction in Gladstone, MB.

“We are trying to make sure that we are geographically diverse as a way to hedge against different weather patterns and growing conditions,” said John Heimbecker, the company’s vice-president. “Our plans are driven by a longer-term strategy, not deregulation of the CWB or railway requirements. We want to get to places that we currently are not represented. Other points on the map are still to come.”

Talk to anyone in the sector, and they will tell you that having fast facilities is not enough—the real prize is getting farmers to deliver. Efforts to secure farmer loyalty for grain delivery have been ramping up with renewed competition in the sector.

“The only way to get market share is by having yourself in a position to buy grain in the country, though it doesn’t hurt to have a terminal or two as well,” said Mark Hemmes, president of Quorum Corporation, the organization responsible for monitoring grain transportation for the federal government. “The starting point to get into the game is that you have to be able to buy grain in the country and...
you have to have a place for farmers to deliver it."

It is a challenge that the CWB has had to face as it transitions to privatization. The announcement of three new high-throughput elevators in Bloom, MB, Pasqua, SK and Colonsay, SK, added an entirely new dimension to the CWB’s business. Both facilities are scheduled for completion in time for the 2015 harvest.

“We have lots of experience on the marketing side and working with partners, but ownership is new to us,” said Gord Flaten, vice-president of grain procurement for the CWB. “We knew from the start that the path to a viable grain company is to have a network of assets. We plan to keep buying grain in the way we are doing it currently, but the addition of our own assets will be important, as well.”

Once the privatization of the CWB is complete, the farmers who deliver to its facilities will have a unique opportunity to earn equity in the company. The transition has been underway since they began distributing entitlement to equity through the farmer ownership program in 2013. Through the multi-year program, producers who deliver to the CWB will be credited with $5 per tonne in ownership in the privatized company.

“There is no other opportunity for farmers to own equity in a significant-sized grain-handling company in Western Canada,” said Flaten. “We intend to have a full network across the Prairies, but we are not announcing the numbers and locations before they are ready.”

While the major grain companies are investing in their own infrastructure, Manitoba-based FarmLink Marketing Solutions is leveraging the rapid growth in on-farm storage by marketing grain straight from farmers’ bins. What started as a consulting business to help growers maximize profits is becoming a virtual grain company, managing the sale and delivery of three to four million acres of crops annually.

“Farmers’ storage is not just a place to park grain until it’s ready to sell; it’s an income asset of its own, but hasn’t been treated that way,” said Brenda Tjaden Lepp, co-owner and chief analyst for FarmLink. “Big elevators on rail lines are not our business. We are using technology and advanced management practices of our clients and staff to find a new and better way to connect end-use customers with growers.”

According to Hemmes, the abundance of on-farm grain storage in Western Canada has a significant impact on the way grain is marketed.

“Producers are buying incredible amounts of on-farm storage, so anybody building additional storage capacity has to contend with that,” he said. “Building more capacity is in some ways necessary because railways are not efficient,” he added. “Companies compensate by increasing storage and get more market share. It’s smart business.”
Hawn Thacker knows the signs.

When he sees turtles moving up onto the road where he’s working in east–central Colorado, it’s a good indicator that there’s rain on the way that could interrupt winter wheat harvest.

After 22 years on the custom combining circuit in the U.S., Thacker, who operates out of a home base at Burdett in southern Alberta, is familiar with the pattern. Turtles and snakes moving to higher ground in the morning is a likely sign there will be some weather later in the day. Humid, daytime temperatures reach 26°C to 32°C, and then come the thunderstorms in the late afternoon and evening. And often, along with the heavy rain comes hail.

“It is just part of the monsoon system in this part of the U.S.,” said Thacker during a mid-June interview. “You can get those thunderstorms nearly every day. I have seen us all set to go and we’re just waiting because the grain is a bit tough, and then a storm will move through with hail and in 15 minutes it takes out 2,000 acres of wheat right in front of you. And then you just have to move on.”

That same day, a bit further east in western Kansas, Lee Petersen and his Saskatchewan-based custom combining crew are also harvesting winter wheat. They had to leave quite a bit of crop behind in Oklahoma because that area had received about 10 inches of rain over three weeks—the crop was getting very weedy and the farmer decided he would cut it for winter feed.

“We’ve had a bit of rain since we’ve been here in Kansas,” said Petersen, who farms at Hodgeville, Saskatchewan, when he’s not custom combining. “But we are combining today. The forecast is for 50 per cent chance of rain for the next five days, so we’ll see what happens. This area is a long ways from being out of the drought, but it is probably the greenest I’ve seen it in a few years.”

Those weather concerns are a fact of life for these Canadian-based custom combiners. And yes, there are plenty of “facts of life” in the custom harvesting business. You need a sizeable investment in machinery, trailers and trucks. You have to line up and manage a reliable work crew for the season. You have to move what amounts to the equivalent of a small circus anywhere from 2,500 to 3,000 kilometres just to get to your work starting point. You’re away from home for three to four months. You have to set up camp and then move the whole operation every week to 10 days or so as you edge north. And then, on top of all that, you have to keep your eye on the sky—what’s the weather going to do today?

Both Thacker and Petersen said most of the U.S. winter wheat harvest is a race against the clock and the weather. When the crop is ready, it is ready. Farmers want it harvested in a timely fashion, because if there is a delay weather can downgrade quality and yield very quickly. A hailstorm can wipe it out completely. Because of the weather systems, the U.S. winter wheat crop doesn’t enjoy the relatively wide harvest window found across the Canadian Prairies.

Storms can be a daily concern, and most farmers are hoping for a four-, five-, or six-day break in the weather to get the crop harvested.

The custom combining business isn’t for everyone, “but it does get into your blood, a bit,” said Petersen, whose father...
and uncle started back in 1968 and were involved for years. Petersen struck out on his own about 16 years ago.

“It is a different life, but you meet some great people along the way,” said Petersen. “One thing I think about a lot is you’re working for other farmers, and here’s someone who’s put everything into this and you’re helping him get that crop harvested. It’s his year’s work and you’re helping him get it into the bin.”

Thacker, whose family name is well established in the southern Alberta agriculture industry, farmed himself before moving full-time into custom harvesting 22 years ago.

Today, his service includes seven Case 8120 combines equipped with 36-foot headers, grain carts, grain trucks, crew trailers and tractor-trailer units. He also offers custom swathing services as needed—although that’s mostly in Montana and Alberta. He buys new combines each year and has the manufacturer deliver those machines directly to the first farm he’ll be working on in a southern Midwest state.

“So when we left Alberta in early June we had a total of 12 vehicles on the road,” said Thacker. “That included nine tractor-trailer units and three pickups. Going down, because the combines are delivered to the farm, we can get moved down in one trip. Coming home, because we are bringing the combines with us, it will take two trips to get everything back into Canada.”

Thacker actually only uses five combines in the most southern states—primarily for winter wheat harvest—and picks up two more in Montana as he moves into harvesting barley, as well. He wraps up the season in Alberta with all combines working until October to harvest mostly wheat, barley and canola in Canada.

Operating a custom combining service takes a lot of co-ordination, said Thacker. There is not only a fleet of equipment, but he has up to 17 employees. They set up camp, usually at full-service campgrounds, and plan to book about two weeks of work in any given location before the next move.

“Costs have increased considerably in recent years,” he said. “At one time, we needed to have 300 acres per machine at one location to make it economical, and now we need 1,000 acres per machine.”

Thacker said depending on where he starts—New Mexico or Kansas—it’s a 2,200- to 2,800-kilometre trip to the starting point. In the U.S. (with lighter crops), all equipment will use about 1,500 gallons of diesel fuel per day, and
that increases to about 2,300 gallons per day in Alberta with heavier crop conditions.

“In a season, we buy about $450,000 worth of diesel,” said Thacker. “So you can imagine the fuel man is our best friend. We try to contract and forward price as much as we can.”

While custom combining rates vary, depending mostly on crop conditions, he said margins are tight.

“We have a new combine with two headers, and even if you can pick up good used trailer units, you are looking at at least a $500,000 price tag to get each machine to the field.”

Thacker said his rates for custom combining range from about $32 per acre plus fuel all the way up to $60-plus when they supply their own fuel and the trucking is included, but he said there is a wide range of arrangements and rate structures, depending on the crop and the individual farmer.

“You have to be very flexible and very adaptable in this business,” he explained.

Ted Nibourg, an Alberta Agriculture and Rural Development business management specialist, said the interest in using custom farming services varies widely. Based at the Ag-Info Centre in Stettler, he receives a lot of calls from farmers trying to figure out the proper rate to pay a neighbour for custom work.

“A lot of it is just neighbour-to-neighbour, one-off type work,” said Nibourg. “Somebody’s haying equipment breaks down so the neighbour goes over and does some cutting—what is that worth?”

Among the “professional” custom farming services, field spraying is probably most popular, said Nibourg.

“Farmers may not want to buy a big field sprayer, they may not want to bother with getting a pesticide applicator’s licence, or they may just not want to bother working with chemicals.”

Josh Umscheid and his Big Slick Custom Spraying company near Vulcan started with a sprayer and a trailer, but the operation has since expanded due to local demand.

He has upgraded field-spraying equipment a few times, now running a 120-foot-wide Case IH 4430 sprayer, complete with auto-steering, GPS guidance and “all the bells and whistles.” He also owns a semi tractor-trailer unit with a 52-foot flack deck trailer. It carries three water storage tanks with a total capacity of 4,000 gallons, plus has room to carry chemicals and other supplies.

And the work has changed too, said Umscheid.

“The first year, I was trying to get the business established so I was taking on all the jobs I could, and that meant 160 acres here and 500 acres there,” he said. “It was a lot of travelling. But since then, I have really narrowed it down to three main customers,” totalling about 20,000 acres.

When he started, it was mostly applying a pre-seeding burn-down, followed by in-crop weed control, “but the last couple years I have been busy really from May until November.”

“I am seeing clients show a lot more interest in fungicide applications these days,” said Umscheid.

Depending on the farm and growing conditions, he covers all of those 20,000 acres at least twice, quite a bit of it three times, and some of it four times.

“Probably our slowest year (due to weather) was about 40,000 acres, our best or busiest year was about 80,000 acres, and probably we’re averaging 50,000 to 60,000 acres per year.”

Treatments include pre-seeding burn-down, in-crop weed control, fungicide and pre-harvest treatments, and some post-harvest weed control applications.

Custom haying services are probably the next most popular of the custom services, Nibourg said. If a beef producer has 200 or 400 head of cattle, having one’s own haying equipment may make sense, “but if someone has 50 to 60 head, in most cases it doesn’t pencil out to own your own equipment.”

Although custom harvesting services are in demand, timeliness remains the key factor.

“A lot or most farmers own their own equipment simply because they want the crop harvested when it is ready,” said Nibourg. “They’ll hire custom combines if they can get them when they’re needed.”
In comparison, Thacker will combine for some new farmers every year in addition to his base clientele of repeat customers. If there is drought or hail in one area, he may work for different farmers who have crop in another area. He has only one large farm customer in Alberta to whom he has provided custom combining services for 21 years.

When Petersen’s father, Lloyd, and his uncle Cliff started custom combining in 1968, they headed into the U.S. with two John Deere 95 combines. Lloyd only stayed with it a short time and decided to concentrate on building the family farm at Hodgeville, while Cliff carried on for years. Petersen and his father began doing some custom combining work in Canada in 1980. Then in 1998, when an opportunity came along to expand, Petersen began custom combining in the U.S. When he married, Petersen took his new bride on a honeymoon to the U.S. along with three 9600 combines.

"Today, we get our own crop seeded at home first, and then usually head south around the first of June," said Petersen. They crop about 5,000 acres of grains, oilseeds and pulses and run a small cow–calf operation at Hodgeville.

Usually starting out in Oklahoma, he makes his way north through Kansas, Colorado and Montana, arriving back in Canada around the end of August. He combines his own crop at home, along with doing custom work in Saskatchewan until late October.

The custom harvesting equipment lineup this year includes four New Holland CX8080 combines with 35-foot MacDon straight-cut headers, one tractor, a grain cart, four semi units to haul machinery and a grain trailer. He also has trailers to accommodate a crew of seven seasonal workers.

And being on the harvest circuit in the U.S. continues to be a family affair, as Petersen’s wife and three children join him on the annual trip south.

“When we leave Saskatchewan, the furthest point south is about a 2,500-kilometre trip,” said Petersen. “I always say it takes three days to get down there and three months to get back home.”

Similar to Thacker’s experience, Petersen’s main focus is on harvesting winter wheat. He has done some corn and soybeans over the years, but those crops fall mainly into the “fall run” and the timing conflicts with harvest in Canada. Some of the earliest fall seeded crops in Texas are ready for combining in May. Petersen starts with winter wheat in Oklahoma. He said crop ripening progresses at the rate of about 19 to 24 kilometres north each day.

Most of the winter wheat crops in the southern U.S. are straight-combined and most grain is hauled from the field to nearby elevators. As Petersen moves into Montana, he’ll start to see more swathed crops, and more grain is stored in on-farm bins.

Happy with the reliability of his equipment, he’ll keep his New Holland combines in service for about three years before trading. The company offers a harvest support system, which has a team of service technicians in the field following custom combiners—providing timely service and minimizing downtime.

Again, he said weather is the big factor. Even when it is sunny, high humidity can be a factor in delaying harvest.

“We work as many hours as we can, and the odd day might put in 20 hours, but you can’t keep up that pace all summer,” he said. “On rain days we service equipment and take a break, and most days, depending on humidity, we hope to get started before noon and then run until about 8:30 at night before humidity shuts you down again.”

Petersen said that, because of weather, it is a narrow window for these U.S. farmers to get the crop harvested.

“At home, if a guy had 2,000 acres of wheat, he’d probably have one combine

A DYING ART: The number of custom harvesting businesses across Canada continues to shrink. Today, they number about a dozen.
and work away at it to get it harvested,” he said. “But [in the U.S.], if a guy has 2,000 acres of winter wheat, when it is ready, it is all ready, and he likes to see machines moved in so it is done in a couple days.”

For Petersen, custom combining rates range from $30 to $40 per acre, but there can be a lot of variability in the details depending on the size of the crop, hauling distances and other factors.

“Timeliness is worth a lot,” said Petersen. “If you have a 40-bushel crop that goes as No. 1, that’s worth a huge amount compared to if there is some weather delay and it comes off as a No. 3.”

While there is always business turnover, Petersen works mainly with an established clientele—some who have been with him for 16 years.

Petersen and Thacker are two of about a dozen Canadian custom combining operators making the trek south each year to harvest mostly winter wheat crops from New Mexico, north through Texas, Colorado, Oklahoma, Nebraska and Montana, before arriving back in Canada in time to harvest a variety of crops, including barley, wheat, canola, flax, peas, lentils and mustard.

They are carrying on a business tradition that became well established during the Second World War. With a shortage of manpower and machinery during the war years, U.S. farmers needed help to get the crop off.

“The shortage of labour and machinery during World War II, coupled with the resurgence of wheat production, precipitated custom combining,” said Thomas Isern, a history professor at North Dakota State University. “And it wasn’t even a labour issue as much as a machinery issue. With limited allocation of steel, there weren’t as many machines available.”

Isern said records show there were about 500 machines in itinerant operation in 1942, and as many as 8,000 machines operating in Kansas alone by 1947. One of the most dramatic episodes of the era, he said, was a special allocation of steel to Massey–Harris of Toronto in 1944 to build 500 self-propelled harvesters to be used as custom combines.

While the demand for custom combining services increased for many years, it eventually plateaued and, for a number of reasons, has been on the decline since the 1970s, said Isern.

Petersen and Thacker, who are president and vice-president, respectively, of the Association of Canadian Custom Harvesters, said there is still work out there, but margins are getting tighter and manpower continues to be an issue, as well.

“There are fewer Canadian custom harvesters going into the U.S. for several reasons,” said Thacker. “On the U.S. side, we’re seeing farms get larger, and perhaps more self-sufficient in harvesting their own crops. And we’re seeing some diversity, too, with different crops in rotation, so not everything is ready to harvest at once.

“From the custom combining side, it takes a fairly large capital investment just to get started,” he added. “And custom harvesters run into the same issues as farmers in trying to find labour. When I started there were about 80 custom harvesting outfits in Canada and today we’re down to about 12 crews. There is work out there, and a demand, but margins are very tight.”

Petersen agreed that the economics, labour issues and, of course, the lifestyle—not everyone wants to be on the road away from home for three months—are all challenges for the industry.

“Economy of scale is important. You can be out there with several machines, but I know several operators who just have one combine, good clientele and make it work, said Petersen.

Tackling the millions of acres of wheat harvest with thousands of harvesting machines is an amazing sight and lifestyle, said Conrad Weaver, a U.S. filmmaker from Frederick, Maryland.

Earlier this year, he completed a 65-minute documentary film called The Great American Wheat Harvest, airing at different venues this summer, and he hopes to release it for TV distribution and DVD sales later this fall.

The film captures the life and times of custom harvesting outfits that spend months on the road, travelling from town to town and from state to state, bringing in the vast U.S. wheat crop. Petersen and his crew are among those featured in the film.

“I grew up on a dairy farm in Ohio,” said Weaver. “So I had a connection with farming, but I didn’t know a lot about the whole custom harvesting business. One day, about four years ago, I was reading a blog about custom harvesting on the Great Plains and my wife said, ‘you should make a film about that.’ So that’s when I really started thinking about it.”

Over the next three years, he followed three custom harvesting crews, capturing the experiences of the people as they worked their way across the American Midwest.

“I think what struck me the most is here are these custom harvesters and they each have made this huge investment in machinery and in their lives for this career, and yet they have no real safety net themselves,” said Weaver. “It is a very risky business. If they run into drought in Texas, or hail in Colorado, freezing temperatures, or storm systems that can settle in for weeks, they have no protection themselves.

“There is opportunity there, and they seem to get this harvest bug for the lifestyle. The film has beautiful scenery and it also captures the story of the lives of these people—their resilience. And you also get a sense of the real community they form and how they help each other. It is a great story.”

If you have a 40-bushel crop that goes as No. 1, that’s worth a huge amount compared to if there is some weather delay and it comes off as a No. 3.”

—Lee Petersen
Located inside the skeleton of a 1920s-era movie theatre just off of Main Street in Turner Valley, Eau Claire Distillery is the first of its kind in Alberta—a genuine craft distillery using only premium Alberta grains and Rocky Mountain water to make its small-batch spirits.

“I thought Alberta of all places, with our premium grain, should be a place where we have a craft distillery,” said Eau Claire’s president and co-founder David Farran. “Alberta ships our barley to Scotland to make scotch, so why don’t we make premium products here?”

Until recently, the answer to that question was quite simple: government regulations made it nearly impossible.

For many years, Alberta’s perfect conditions for craft distilling went to waste. Government regulations required that any distillery in the province have the capacity for 250,000 litres of absolute alcohol production annually. This amounts to roughly 625,000 litres of 80-proof vodka, gin or whisky—far more than any true craft distillery could ever produce.

Then, in December 2013, the Alberta Gaming and Liquor Commission eliminated the minimum production rules, opening the door for a craft distilling industry to establish itself in the province. Farran and his business partners were the first to take the plunge.

Farran’s career started in beer rather than spirits, when he joined fledgling craft brewery Big Rock as vice-president in 1984. He has also founded several successful businesses, including Pipestone Travel Outfitters, Associate Veterinary Clinics and Medalta Healthcare Solutions.

Farran created Eau Claire Distillery with the help of two of his old colleagues: former Big Rock brewmaster Larry Kerwin and former Associate Veterinary Clinics CFO Brad Stevens. Together, they built the business from the ground up.

Turner Valley was chosen as the perfect location for the distillery, Farran said, because of its agricultural roots and storied history as a hotbed of illicit alcohol production during Prohibition.

“Prohibition and boom time in Turner Valley overlapped, which created some incredible sort of frontier town mentalities,” he said. “There were lots of stills hidden in the hills. There was a street called Whisky Row full of speakeasies.”

Despite the end of minimum production requirements, Farran and his team faced their fair share of regulatory hurdles and other challenges on the way to making their business plan a reality.

From Grain to Glass

A look inside Alberta’s first craft distillery

By Tyler Difley • Photography by Matt Palmer
“Being the first and pioneering is never the easiest position to be in,” he said. “There was a lot of fear of what would happen in the industry and trepidation on the part of the government to allow change, but it’s the right thing for the consumer.

“We’re in virgin territory, but it’s a fun place to be.”

After a few months of hype, Eau Claire released its first two products this summer: Three Point Vodka and Parlour Gin. Both are made with locally grown malting barley—an unusual base for vodka and gin, but one that produces a smooth, flavourful spirit with an appealing touch of sweetness. For the gin, Eau Claire uses a blend of 12 botanicals with an Albertan twist, including Saskatoon berries and rosehips.

The bottles for both the vodka and the gin carry eye-catching designs, depicting what Farran called “social animals.”

“We wanted to develop what we thought would be an iconic Canadian brand, something that reflected Alberta and our home roots,” he said. “We thought the best way to reflect that would be to incorporate something that we call social animals, which are different Canadian animals in social scenes that would be reminiscent of Alberta country culture.”

In the case of the vodka, the name of the spirit also draws inspiration from its local roots and geography. Three Point Vodka is named after Three Point Creek, a tributary of the Sheep River, where Eau Claire gets its water.

Eau Claire plans to add whisky offerings to its repertoire in the near future, Farran said, including a rye whisky and a single-malt. However, according to Canadian law, all Canadian whiskies must be aged a minimum of three years, so the release of these darker spirits is at least a few years away. In the meantime, Farran said, he and his colleagues are developing some other creative spirit offerings.

“We have a lot of ideas,” he said. “We’ll come out with some special seasonals, particularly around Christmastime, but I’m not ready to reveal the secrets yet.”

At Eau Claire, the grain that gives life to its spirits is never an afterthought. In fact, it’s an integral part of the distillery’s farm-to-glass philosophy.

“You have to be able to source it and know where it came from at the farm, then follow every transparent step of the process right through to the bottle,” Farran said. “We’ve been sourcing it direct from farmers and we’ve been getting good advice on growers from a lot of the seed-cleaning plants that have kind of done referrals for us.

“We do plan to profile our farm suppliers on our website so people can actually see directly where it comes from in a transparent food chain.”

According to Farran, the base grain is vital for the terroir it lends to the finished spirit. Terroir—a French word meaning the specific characteristics imparted to an agricultural product from the environment in which it was grown—is a concept most commonly used in relation to wine, but Farran said it is equally applicable when it comes to the grain used for distilling.

“When you actually choose specific grains according to soil type, climate and according to the year, you get some amazing differences in taste that get translated into the product,” he said. “Instead of treating the product as a uniform commodity, you’re now talking about the differences from year to year, almost as you would a fine wine.”

Farran is so passionate about grain that he farms some of Eau Claire’s supplies of barley and rye on his own operation near Turner Valley, using his team of horses and a 100-year-old plough.

“Prohibition and boom time in Turner Valley overlapped, which created some incredible sort of frontier town mentalities.”

—David Farran

“We have about 25 acres under cultivation by horses,” he said. “Which is a small part of our overall production, but it makes for great special editions.”

The development of Three Point Vodka—the product that launched Eau Claire into the spirits market and gave people their first exposure to the craft distillery—was extremely important, Farran said. Eau Claire reached out to a variety of industry experts, including several local bartenders and storeowners, to run focus groups.

“They approached us early on to get our opinion on things like packaging, price points, style, what’s working, what’s selling for us, and what we’ve seen on the market where we think there’s opportunity,” said Jesse Willis, co-owner of Calgary’s Vine Arts Wine and Spirits. “It’s been a neat process for us because we’ve been able to watch them along the way and give a little bit of our input and our insight.”

According to Farran, the consultation process was extremely valuable in crafting the final product.

“We wanted to make sure what we were making fit the market,” he said. “We did go back to the drawing board a few times.”

BOTTLE SERVICE: Eau Claire’s Three Point Vodka is now available at several Alberta bars, restaurants and liquor stores. Each bottle retails for about $50.

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BOTTLE SERVICE: Eau Claire’s Three Point Vodka is now available at several Alberta bars, restaurants and liquor stores. Each bottle retails for about $50.
Once Farran and his team were satisfied with their vodka, Eau Claire’s finished spirit slowly filtered into the market. The initial release started with a few bars, restaurants and liquor stores around the province, including Vine Arts and popular Calgary restaurant Charcut Roast House. So far, the reception has been overwhelmingly positive.

“I think people are surprised by how smooth it is,” Farran said. “Many have said they never expected that vodka could be something you would sip neat, much as you would a whisky.”

Matt LaRocque, Charcut’s wine and service manager, said he has seen a similarly positive response at the restaurant. The only difficulty has been convincing drinkers to try something different in place of their usual favourites.

“It does take a little bit of hand-selling because you have to break people out of their habits for Grey Goose and some of the bigger names,” he said. “Generally speaking, you just need to get them to try it. Once they do, they love it.”

The bartenders at Charcut are fans of the vodka as well, LaRocque added.

“At Charcut, we really like to cocktail and focus on the ingredients within them,” he said. “The guys behind the bar are essentially chefs, and the ingredients that they get to cook with are vital. What Eau Claire brings is just a great flavour component.”

Although Eau Claire is the first craft distillery to set up shop in Alberta, the industry is thriving in other parts of the country. In recent years, a number of new micro-distilleries have sprung up from coast to coast, with particularly high concentrations in British Columbia, Ontario and the Maritimes. Many of these upstart distillers have already received critical acclaim for their creations.

According to independent whisky commentator Davin de Kergommeaux, the quality of Canadian craft spirits stems from the difficulties of starting a craft distillery. These allow only the most passionate and skilled distillers to excel in the industry.

“Craft products are somewhat more expensive than mainstream offerings and, as such, appeal more to the connoisseur,” he added. “This is why they have to be good to survive.”

Although they lack the economies of scale possessed by their mainstream competitors, craft distillers do have some advantages over their commercial brethren.

“The breadth of flavour and selection is large, and, in some cases, each batch introduces new flavours,” de Kergommeaux said. “As well, craft distillers can experiment with different grains, combinations, barrels and so on, one small batch at a time.”

For Farran, the biggest advantage lies in the differing motivations of small- and large-scale distillers.

“[To focus on quality and taste rather than volume] speaks for itself,” he said.

Now that Eau Claire has shown a small-batch distillery can succeed in the province, Farran said he hopes more distillers will follow his lead in order to build a craft industry in Alberta. Before long, more enterprising individuals could be transforming Alberta’s natural riches into handcrafted spirits.

“It’s going to be great to showcase what the province can do,” LaRocque said. “And these guys are definitely going to lead the way.”

SPIRITS OF THE WEST: (from left to right) Eau Claire founders and friends Larry Kerwin, David Farran and Brad Stevens have brought the craft spirit movement to Alberta.
FROM ONE CAPITAL TO ANOTHER

Former senator returns to Winnipeg

BY SCOTT ROLLANS • PHOTOGRAPHY BY LEIF NORMAN
ANADIAN SENATORS DON’T EXACTLY HAVE A tradition of early retirement. So, it came as a bit of a surprise when Conservative Senator JoAnne Buth announced in June that she was resigning her post after just two-and-a-half years in the upper chamber. Buth has returned to her hometown of Winnipeg in order to take on a new role as CEO of the Canadian International Grains Institute (Cigi).

Buth is taking over from Earl Geddes, who served in the position for the last five years. “I’m in listening mode,” she explained in August. “This is an amazing organization. I’m just going through meetings with each of the staff right now. There’s incredible dedication and commitment here. It’s just great.”

For Buth, it’s the latest fresh start in a lifetime of fresh starts. Over the decades, she has moved from one influential position to the next, usually with an agriculture connection.

“I really believe that when you come into a job you bring a fresh perspective,” she observed. “And, over the years, you lose that perspective and your ability to bring a new approach to things. You have to try to keep your mind fresh.”

Buth can trace her agriculture connection back to a career aptitude test she completed when she was a high school student. “My listing said that I should either go into the military, be an accountant or be a farmer,” laughed Buth. “I don’t know what any of those have in common. Perhaps it’s discipline and courage? Certainly nowadays, if you think of the people involved in farming, it takes a lot of courage and commitment.”

Buth completed a B.Sc. in botany at the University of Winnipeg before moving on to complete a master’s in entomology from the University of Manitoba.

“I did my master’s on mosquitoes while I was working for the City of Winnipeg’s insect control branch. Winnipeg is a good place to do research on mosquitoes,” she said, smiling.

After about six years with the city, Buth felt ready for her first big change in professional scenery. She landed a position as information officer at Agriculture and Agri-Food Canada’s (AAFC) research station in Winnipeg. The job cemented her interest in agriculture, said Buth.

“I was working with some of the big-name people who developed varieties—especially the wheat varieties—that were grown across the Prairies.”

After AAFC, Buth spent some time with DowElanco Canada. Then came an eight-year stint with Manitoba Agriculture, where she progressively moved into management positions running several different sections, including soil and water, crop development and weed management.

With her next job, at the Canola Council of Canada (CCC), Buth began to develop a national profile. “The VP of crop production came up. I went for it, and got it,” recalled Buth. “I always wanted to get into an organization and really make a difference.”

According to all accounts, she succeeded. At the time she joined the CCC, canola had been steadily declining in planted acres.

“It was a really good time to come in and take a close look at the programming and what we were doing,” said Buth. After serving as VP for eight years—starting with crop production and later taking on the biotechnology files—Buth took over as CCC president.

Robert Hunter, currently director of communications at CropLife International, worked closely with Buth during her time at the CCC. Hunter gives Buth much of the credit for canola’s remarkable turnaround.

“Everyone believed in the canola vision for 15 million tonnes by 2015. But it was really JoAnne who, in the end, gave people the actual plan to see that realized.”

Years later, Hunter continues to see Buth as a mentor and role model.

“One of her biggest assets is her ability to bring people together—to get a bunch of people around the table, and have them leave their hats at the door,” he said.

Then, after an unprecedented 13 years with one organization, Buth got a call from the Prime Minister’s Office. “It came right out of the blue,” recalled Buth. “I was out of town, and my assistant sent me a note saying that Derek Vanstone from the PMO had called and wanted me to call him back—no rush.”

Buth assumed Vanstone was calling for her ideas for a board, or something of that nature.

“I forwarded the message to a couple of friends over the weekend, and said I was going to hold out for a Senate appointment—just joking. And then, I called him the following Monday, and he said, ‘The Prime Minister wants to know if you would be interested in an appointment to the Senate.’ I just about fell off my chair.”

A Winnipeg reporter asked Buth how she thought she would do as a senator, considering her total lack of political experience.

“I told her there’s nothing more political than the grain industry,” Buth laughed.

Even today, Buth feels awestruck over her Senate appointment. “I was number 916 in Canada. I mean, just think about that—916 since Confederation.”

Despite a steep learning curve, Buth soon realized her management experience would serve her well.

“I just thought it was a really great opportunity to come back into the ag industry, and to work in an organization that’s a real jewel.”

—JoAnne Buth
“Politics is about trying to get done what you believe you need to get done. You try to lead people in a certain direction,” she explained.

Buth particularly enjoyed the breadth of experience the job gave her.

“One day I might be subbing in for somebody on a committee where we were discussing the succession to the throne in England, and then the next day I would be talking to a pig farmer from Manitoba, and then the next day I’d hear from a student association about the price of textbooks,” said Buth. “You get to participate in a lot of different areas.”

Buth would likely still be a senator if the Cigi job hadn’t suddenly opened up.

“I wasn’t actually looking,” she insisted. “The Senate has been through a lot of turmoil in the last few years, but I still believe in the institution and what it’s doing.”

Still, Buth couldn’t pass up the chance to take on yet another new challenge.

“I just thought it was a really great opportunity to come back into the ag industry, and to work in an organization that’s a real jewel.”

Buth’s close friend Trish Jordan, public and industry affairs director with Monsanto Canada, is happy to help welcome her home.

“I’m sorry to lose her in the Senate—she was such a great advocate for our industry and for Manitoba—but I’m really excited for her new opportunity,” said Jordan. “Cigi is a key institution for the grain sector, and JoAnne brings a set of skills that will be really welcome. She’s going to do a great job there.”

At Cigi, Buth looks forward to helping the grains industry adapt to the new environment of open grain marketing.

“The whole purpose is to bring value to growers,” she said. “The focus needs to be on new markets, new customers and higher value. If you get increased demand at a higher value, that will translate to the grower getting more money. At the end of the day, we don’t have an industry unless the grower chooses to grow it.”

She sympathizes with farmers who find themselves grappling with the transition.

“It was much simpler when there was just one marker. But I think there are many more opportunities now.”

Buth points to Cigi’s long-running combine-to-customer course as one way the organization is working to help producers cope.

“The more knowledge farmers have, the better decisions they make.”

With her Senate days behind her, Buth is also hoping to find more time for escaping into her artistic interests. Her current passion is painting on silk.

“You don’t think about anything except the line that you’re making, or the colour that you’re using,” she said. “It takes you out of yourself. It clears your mind, and all sorts of things get solved when you’re not actually thinking about it. Somehow, in the back of your mind, your subconscious is sorting through things. It leaves you refreshed and ready to tackle things again.”

Things like her new position as Cigi’s CEO, is just the latest opportunity in a lifetime of opportunities.
Smart integration

BRINGING TRADITIONAL MANAGEMENT PRACTICES INTO THE FUTURE

By STAN BLADE, P.Ag.

From Lab to Field

AMERICAN SATIRIST H.L. MENCKEN provided the classic quote, “For every complex problem there is an answer that is clear, simple and wrong.” Sometimes, a complex problem demands a complex solution—and modern agriculture is a perfect example.

Historically, science focused on one variable at a time to see how changing a single factor would have an impact on the bigger system. Agricultural research led the way in the 20th century by developing elegant statistical designs for its field experiments so that the influence of a single variable (fertilizer rate, cultivar, crop sequence, pest control) could be quantified, and recommendations made based on that variable’s impact on yield. This was a very effective approach to identify “big hammers” for dramatically increased crop production.

Over the last decade, however, the agricultural community has introduced more complex solutions—system-based and agro-ecological approaches to developing cropping regimes that are economically and environmentally sustainable. Our industry (producers, input suppliers, researchers, governments, producer organizations) “talks a good game” about how we have turned the corner and are engaged in integrated management practices. The question is whether we have really adopted this approach.

I recently attended a global agricultural biotechnology meeting where one recurring theme was the impact of glyphosate-resistant Palmer amaranth on southern U.S. agriculture. Producers kept applying glyphosate with such selective pressure that resistant weeds have now taken over millions of acres in the United States. U.S. Department of Agriculture research leader Stephen Duke (using data from the United States and from Hugh Beckie, research scientist with Agriculture and Agri-Food Canada) observed that Canada enjoyed a much longer period between the introduction of herbicide-resistant crops and the observation of herbicide-resistant weeds. His explanation was that our first transgenic canola systems used a number of herbicide platforms rather than only glyphosate—proof positive that a complex, multipronged approach is often the more effective choice in the long run.

Agricultural researchers, input suppliers and the production community have long celebrated the simple solution: All we need to do is find the highest-paying crop, the best cultivar, the best fertilizer rate, the best crop protection product, and everything will be fine.

We can be proud of the amazing productivity gains we’ve experienced in agriculture. These results have been achieved through research, which has given us technologies that allow us to use easy, predictable practices that make us ever more efficient.

However, if yield is the cumulative result of crop genetics, climate and management decisions, shouldn’t we consider our options for managing crops in an integrated manner? Perhaps it is time to think about incorporating “old” ideas like multilines (different cultivars in the same field), intercropping (different crops in the same field) or expanding our growing season through more winter crops—or perhaps even introducing permaculture crops. I recognize that these take us back to agricultural practices that have been eclipsed by modern practices. I am not advocating that we revert to a different time, but it may be worth thinking about how traditional management practices—including grain legumes, managing beneficial insects and better understanding the likely growing-season weather—can be further integrated into how we grow crops in Canada.

We have a model of where these answers can be generated. The Broadbalk plots (data collected since 1844) at the Rothamsted research farm in England, the University of Illinois’s Morrow continuous corn plots (1876), and our own University of Alberta Breton plots (started in 1929) provide a window on how our past and current practices influence our future potential productivity. These sites provide a “living laboratory” for a wide array of researchers—entomologists, soil scientists, plant breeders, economists and many others.

Long-term agronomic experiments have fallen out of favour with funding agencies and some research organizations. The industry and the research community need to work together to enhance our current activities and identify new ways to harvest data from the work we do in a more collaborative, intentional manner whenever field experimentation is planned. The result will be new ideas that producers will be able to incorporate into their operations to improve long-term productivity and sustainability.
Personal stories: Compelling and powerful tools for change

CHANGING MINDS WITH THE POWER OF PERSONAL EXPERIENCE

Building on more than a century of Canadian agriculture innovation and know-how, farmers are reaching record levels of productivity while actively protecting the environment. Canada’s safe, sustainable and cost-efficient food-supply system is the envy of the world.

But the average people on the street remain skeptical and unsure because they are completely unaware of what farmers and industry are doing. Many city people are more than two generations removed from the farm. And there is a lot of misinformation circulating and multiplying on the Internet.

No organization is held up for questioning more than Monsanto.

While Monsanto’s headquarters are located in St. Louis, Missouri, known as the “show me” state, it seems today we are part of the “show me” generation. And farmers are having a hard time keeping up with all the misinformation, which is emotionally based, rampant and immediately available (sometimes even “viral”). After all, farmers need to make a living.

But it does seem that this sort of misinformation is reaching its way into the halls of legislatures and Parliament, and beginning to have an effect on public policy.

So how can farmers fight back?

By making it personal.

According to Cami Ryan, Ph.D., an innovative thinker and communications expert who explained the art and science of the food conversation in a recent Ag More Than Ever webinar, “We think in pictures and we are story processors.”

Farmers’ personal stories are an important government relations tool to bring balance to weighty, often confused issues. I have personally seen politicians and the media perk up, lean forward and pay attention when a farmer tells a personal story one-on-one. Personal stories are compelling and powerful tools for change because they are memorable and persuasive. They are effective because they are evocative, emotional and real.

When you need to communicate an issue, think to yourself, “How does this affect my own farm personally?” Tell your personal story, explaining the physical processes on your farm. For example, when you are explaining the grain handling system, describe how you haul your grain to the elevator, explaining the steps you take. Do not assume the person you are talking to knows anything about how you farm today.

When telling your personal story, be concise. Make sure you have a catchy headline to open with, move to an exciting lead, and narrow your story down to three main points. If you need to explain how rail service issues need to improve, describe how last year’s carryover of grain is affecting your farm this harvest by breaking it down: when you usually haul your grain to the elevator, why you are forced to do it differently this year, how late trains affect your busy schedule, and the financial cost to your own farm.

Pictures and videos are also helpful in communicating ideas to the “powers that be” in Ottawa. Personal stories and pictures from your farm are compelling, real-life evidence that farm groups and farmers need to fully utilize when appearing at a government committee.

I saw a presentation exclusively made up of pictures, and it was referred to as the “best presentation” on the grain handling issue. Likewise, I have seen a farmer give an effective presentation on the complicated topic of low-level presence (LLP) in grain by using pictures; it resonated, made good common sense, and was remembered by agriculture officials and policy makers alike.

Farmers are still seen as the honest broker, and there is power in a farmer’s personal story. The Canada West Foundation recently commissioned an Ipsos Reid survey, which found that Canadians trust farmers the most compared with those in the energy, mining and forestry industries.

Knowing this, farmers need to bravely go where they have not gone before. Farmers need to move outside of their comfort zone and share their powerful personal stories with government and also with the public at large.

Janet Krayden is a lobbyist and communications expert living in Ottawa. She originally hails from a mixed farm near Acme, Alberta.
FOR THE LAST THREE YEARS, Canadian wheat researchers have been looking into the nutritional value of heritage varieties of wheat in order to combat what they believe to be myths about the grain in popular culture.

Dr. Ron DePauw, a researcher at the Semiarid Prairie Agricultural Research Centre (SPARC) in Swift Current, SK, decided to dive into wheat history to get the goods on the world’s biggest crop.

He partnered with Dr. Nancy Edwards, program manager of bread wheat research at the Canadian Grain Commission, who studied milling and baking properties, and Dr. Nancy Ames, a research scientist at the Richardson Centre for Functional Food and Nutraceuticals in Winnipeg, who looked into nutritional components of heritage wheat.

The goal was both simple and complex: Determine if the common, modern varieties of wheat on the market had changed on a genetic level—in terms of proteins, and also in terms of milling and baking.

“There’s this misinformation that the modern varieties are somehow less nutritional than heritage varieties,” said DePauw.

The team started their research in 2011, looking at heritage varieties that were available to grow in Canada 100 years ago. They studied 20 varieties that spanned the wheat genealogy from 150 years ago to present, including Ladoga, Red Fife, Hard Red Calcutta, Marquis, Thatcher and Neepawa, and contemporary varieties such as Carberry and CDC Utmost.

“We’ve got heritage varieties, and—through breeding—added in resistance genes, added in insect resistance,” explained DePauw. “We’ve made the plants shorter, we’ve made the plants stronger and better adapted to growing conditions, better water-use efficiency, and yet they’re all used for making various kinds of bread products.”

Indeed, the research being done by Ames, Edwards and DePauw led them to believe there are no nutritional deficiencies in heritage varieties or in more recent varieties that can trace their lineage to Red Fife, Hard Red Calcutta and Ladoga.

“In terms of quantity of protein, the average protein of the western Canadian wheat crop is essentially the same as what was produced 100 years ago,” DePauw says.

“In general, we haven’t found that many changes,” said Ames. “In terms of the bioactives, we didn’t see much of a difference, but where we did see difference was uniformity of newer varieties, which maintained nutritional components regardless of environment.”

Ames said older varieties and newer varieties were similar in content, but under certain environmental circumstances the heritage varieties were less uniform than the newer ones.

“They weren’t as resilient,” she explained. “The newer varieties maintained levels despite location or year.”

The varieties developed in Canada have maintained a good milling and baking quality, Edwards explained.

“The other thing we have improved on is dough strength [and] water absorption, so when you mix a bread dough, you can get more water into the dough,” said Edwards. “For a baker, that means more loaves of bread for the same quantity of flour. That’s given us very marketable wheat.”

DePauw said he wants this information to be public knowledge—that there have been improvements to the milling and baking properties, but there are no nutritional deficiencies of the varieties developed in Canada.

“Not only have we improved agronomic performance, disease resistance, insect resistance, water-use efficiency and nitrogen-use efficiency, but we have also been able to improve the milling and baking properties in some small way,” confirmed DePauw.

He hopes this research will dispel public misinformation spread by those who aren’t certified researchers or health professionals.

“Research will benefit farmers by assuring consumers of the healthfulness of wheat-based products, which results in increased demand for wheat,” he said.

“I think it’s good that the scientific community and agriculture is investigating these myths,” said Jim Wickett, chair of the Western Canadian Wheat Growers Association. “The diet industry is very large in North America, and there are a lot of people out there exploiting others who either aren’t feeling well or need to lose some weight, and they make a lot of claims they can’t back up. This proves it.”
The proof is in the poop

USING NIRS TO MAXIMIZE FEED GRAINS’ POTENTIAL

NEAR INFRARED SPECTROSCOPY (NIRS) continues to be investigated for its potential to improve feed efficiency in livestock, saving feedlots money and making the livestock industry more profitable.

University of Saskatchewan PhD student Larisa Jancewicz has been working with Agriculture and Agri-Food Canada (AAFC) in Lethbridge to determine how effectively livestock are utilizing their feed. She does so by using NIRS to analyze the chemical composition of their feces.

“In cattle diets, 50 per cent is starch, so starch is a good indicator of how they are using their feed,” Jancewicz said. “The less starch in the manure, the more efficiently they are using starch.”

These humble animal droppings tell an important story. When nutrients, such as starch, are found in high concentrations in the manure, it means the animal is not utilizing them, Jancewicz said, and this waste lowers the feed efficiency. If the grain is processed differently so that fewer nutrients are wasted, feedlots can improve feed efficiency and save money.

“They can get more gain for the same amount of barley,” she said.

NIRS uses the refractory wavelengths of light to estimate the composition of a material, bouncing infrared light off of the material and recording the wavelengths of the light that rebounds. When used on feed, NIRS can reveal the concentrations of various key nutrients.

“We can measure the fibre content, starch content, pectin content,” said Tim McAllister, a research scientist specializing in ruminant nutrition at AAFC’s Lethbridge Research Centre. “Anything you can develop a calibration curve for, you can measure.”

In order to use NIRS to determine nutrient content, a calibration curve is established by comparing NIRS results with the results of traditional wet chemistry tests conducted on the feed, McAllister said. Wet chemistry can provide reliable values for nutrient content, but it is an expensive and time-intensive method of analysis.

“We would collect samples from the industry, run them through NIRS to predict the nutrient content and then send them again for wet chemistry analysis to compare the prediction to what was collected through wet chemistry,” McAllister explained. “Then that would represent the final validation.”

Although creating a calibration curve can be costly, as it requires the testing of countless feed samples before it can be considered accurate, McAllister said the work has value.

“It takes some initial investment to set up a calibration curve, but once you have them and they are validated, then you can save an awful lot of money in the long run,” he said. “If we can develop a calibration curve that anyone can use, we can easily assess the value of the feed and how it is utilized. It represents a major step forward.”

According to Karin Schmid, beef production specialist with the Alberta Beef Producers, Jancewicz’s research presents some intriguing possibilities for the cattle industry.

“Larisa’s work is interesting because it shows that there are areas of improvement for barley production for silage,” she said. “If we can improve feed utilization through feed processing, it will improve feed efficiency.”

“Anything that improves the bottom line on the feedlot side is very important.”

KCL Feeders has used NIRS for roughly three years, according to feedlot manager Riaz Mohammed. He explained that they are extremely supportive of Jancewicz’s research, for which they provide fecal samples from their feedlot.

“We are paying money for the grain we buy and we do not want to lose the grain in the manure,” he said. “So if there is a lot of grain in the manure, we are not utilizing the grain to its full potential.”

Riaz added that many feedlots are not taking advantage of NIRS, either because they are not aware of its value or because they do not have the time, labour and financial resources to conduct proper data analysis.

According to McAllister, outsourcing NIRS analysis could provide a practical solution for feedlots that want to reap the benefits of the technology without the hassles.

“I believe there is an opportunity for a third party to perform the testing,” he said. “I think the feedlots would like a situation where someone can look at the findings and the implications in relation to their bottom line.”

NEW SCHOOL: Larisa Jancewicz’s NIRS research takes a closer look at new uses for the established technology.
In the Beginning

IT PERHAPS HAD AN ODD SHAPE, but this wooden grain elevator built in 1879 at Niverville, MB, got the ball rolling for the storied and sometimes romantic grain storage and handling system in Western Canada.

This round elevator, with capacity for about 25,000 bushels of grain, was the first elevator built in Western Canada. It held some of the first barley produced in Western Canada that was later exported to overseas markets.

The round elevator, perhaps the first and last of its kind, was constructed by John Wittick, who, along with his family, farmed at Niverville. The elevator was built in 1879, remained in use until 1904, and then was dismantled in 1923 and the materials used to build a barn in the area.

While Wittick was the head carpenter on the project, the elevator was originally commissioned by William Hespeler, who was serving as Dominion immigration and agriculture agent in Manitoba and the Northwest Territories at the time.

Hespeler, who was born in Germany, immigrated to Canada with his family in 1850. He and his brother ran a grain mill and later a distillery, which they eventually sold to Seagram’s. Hespeler married a Canadian woman and became a naturalized British subject. He was hired as an immigration agent by the Canadian government in 1871.

On a trip to Germany, he learned there were a number of Mennonite families in Russia wanting to immigrate to the United States. The Canadian government, looking to increase the settlement of Western Canada, sent him to Russia to convince the Mennonites to choose Canada instead. Through his efforts, thousands of Mennonites immigrated to Canada, with most settling in and around Winnipeg. Hespeler was influential in encouraging Icelandic immigrants and Jewish refugees from Germany to settle in Manitoba, as well.
Alberta Barley holds its elections every fall during regional meetings. Any barley farmer is eligible to become a delegate or a director in 2014 so long as they have paid a service charge in 2012, 2013 or 2014 (according to Section 17 of the Alberta Barley Plan Regulation).

Alberta Barley is governed by a nine-person board of directors: Six representing individual regions and three directors-at-large. Following the annual general meeting each year, the board of directors elects the executive, which is made up of the chair and the vice-chair.

This year, there are two regional director positions (regions 1 and 2), and one director-at-large position open for election. Nominations for these positions must be received at the Alberta Barley office by 4:30 p.m. on Friday, Oct. 31, 2014.

Balloting will take place at the regional meetings. Votes for regional directors will be tabulated and announced at the regional meetings, and votes for the director-at-large will be tabulated and announced at the December 2014 annual general meeting.

**REGION 1 – November 20, Bow Island**
*Joint meeting with Alberta Wheat Commission*
Bow Island Multiplex
502 – Centre Street Bow Island, AB, T0K 0G0
One director and two delegate positions available

**REGION 2 – November 19, Three Hills**
*Joint meeting with Alberta Wheat Commission*
Three Hills Community Memorial Centre
222 – Main Street Three Hills, AB, T0M 2A0
One director and five delegate positions available

**REGION 3 – November 25, Lacombe**
*Joint meeting with Alberta Wheat Commission*
Lacombe Memorial Centre
5214 – 50 Ave Lacombe, AB, T4G 0B6
No open positions

**REGION 4 – November 27, St. Paul**
*Joint meeting with Alberta Pulse Growers Commission*
Reunion Station
5101 – 50 Street St. Paul, AB, T0A 3A1
Four delegate positions available

**REGION 5 – November 18, Westlock**
*Alberta Barley meeting*
Westlock and District Community Hall
10711 – 104 Ave Westlock, AB, T7P 2E6
Three delegate positions available

**REGION 6 – November 13, Grande Prairie**
*Joint meeting with Alberta Pulse Growers Commission and Alberta Wheat Commission*
Holiday Inn & Suites Conference Centre, Grande Prairie
9816 – 107 Street Grande Prairie, AB, T8V 8E7
One delegate position available

*Note: One director-at-large position is available and can be nominated from regions 1, 2, 4, or 6*

For more information and nomination papers, please visit [www.albertabarley.com](http://www.albertabarley.com) or contact your regional director.
Empty Pesticide Container Recycling Program

THERE ARE MANY REASONS TO RINSE

#1 Only rinsed containers can be recycled
#2 Protect the environment in and around collection sites
#3 Use all the chemicals you purchase
#4 Protect collection site workers
#5 Maintain your farm’s good reputation
#6 Unrinsed containers may not be accepted

NO EXCUSES NOT TO!

For more information or to find a collection site near you visit cleanfarms.ca

Now, take your empty fertilizer containers along for the ride!