

COMMUNICATING WITH CONSUMERS—SUSTAINABLY

Real conversations mean real results



AWC chairman Kent Erickson and daughter Runa in this year's winter wheat crop during filming for our consumer focused sustainability video. Check out the video at albertawheat.com.

MEET THE AWC STAFF



Erin Gowriluk
Government Relations & Policy Manager

Erin Gowriluk oversees government relations and policy for AWC. In addition to her work on policy issues such as rail transportation, variety registration and plant breeders' rights, Erin's role has evolved to include policy issues related to environmental sustainability. In response to an increased emphasis on environmental sustainability issues, Erin leads the Environmental Policy Committee, a joint committee with representatives from Alberta Barley and the Alberta Wheat Commission. Erin also represents the Commission with the Agri-Environmental Partnership of Alberta and is on the Communications Committee with the Canadian Roundtable for Sustainable Crops.

Erin continues to lead sustainability initiatives including the Alberta Crops Sustainability Certification Pilot Project. Like most of the projects Erin has led, this one involved collaboration from all four crop commissions in the province of Alberta. Farm-level sustainability is becoming increasingly important and Erin is excited to work directly with Alberta farmers to determine what sustainability means at the farm level.

By Victoria Russell
Communications & Events
Co-ordinator

Over the past several years, consumers have grown increasingly aware about the food they eat. Consumers rightfully want to feel good about the ingredients they are choosing for themselves and their families, and they are eager to understand more about where their food comes from (traceability) and how it's produced (sustainability).

As in any industry, customer demand is the key driver of success. For that reason, the food-production industry has made a major shift in delivering on the need for transparency and openness with consumers.

This story can be illustrated through many major advertising campaigns, with the best example coming from McDonald's. The company wanted consumers to know that the beef they were eating was locally and sustain-

ably sourced, and McDonald's invited consumers to ask anything about their ingredients through the "Our Food. Your Questions." campaign. McDonald's has set a positive example in terms of both sustainability and transparency.

These changes in our value chain are driven by consumers' desire for openness and transparency.

When it comes to the changes consumers are looking for, sustainability is growing into a common theme. The AWC, like many other organizations in all levels of our value chain, has recognized the necessity of taking initiative when it comes to sustainability as it relates to agriculture, as well as the need to share what's happening with the consumer.

Sustainability in the crop sector is the focus of the next several pages in this section, because this year, the Alberta Wheat Commission has taken major steps forward in getting

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involved and leading the wheat industry forward—sustainably.

You will learn more about the Alberta Crops Sustainability Certification Pilot Project, a major initiative that the Alberta Wheat Commission is leading in collaboration with Alberta Barley, the Alberta Canola Producers Commission and Alberta Pulse Growers, as well as the people behind the work. And you will learn about a research initiative we are investing in that supports sustainable fertilizer application.

While farmers have always been stewards of the land, they are eager to share their stories with consumers to gain social licence. That's why, with sustainability, we've taken it upon ourselves to deliver on the transparency consumers are looking for and share these initiatives with you. We want to share the good-news stories coming out of Alberta's fields and tell you about all the work farmers are doing to ensure that you're proud to buy Alberta-grown food.

But there's more than that—we want to hear from you. We want to learn what sustainability means to you and how it impacts your day-to-day life. We want to share your voice with farmers in the same way we share the stories of our 14,000 farmer members with you. Our strategy is about finding opportunities to be accountable and transparent to our growing consumer market. Ultimately, you are our end users, and talking candidly with you is one approach to bridging the gap between city and farm.

To share farmers' sustainability stories, we've developed a video that talks about some of the work we are doing with farmers. We encourage you to watch the video at albertawheat.com and learn more about what farmers are doing every day to preserve the land used to grow safe, high-quality crops for generations to come.

SPOTLIGHT ON RESEARCH

Fertilizer management for sustainable crop production

By **Hannah Konschuh**
Research Manager

There is increasing pressure for crop production in Western Canada to be sustainable, largely to gain social licence with consumers. Now, more than ever, consumers want to be sure their food has been grown in an environmentally responsible way, while maintaining the high quality standards that Canadian-grown food is known for.

The Alberta Wheat Commission is investing in a project led by Dr. Miles Dyck, a University of Alberta professor who aims to build on scientific knowledge supporting best management practices for fertilizer application.

Dyck's project will study the efficiency of co-ordinated long-term fertilization practices. Using valuable long-term data from the University of Alberta's Breton Classical Plots, which have been maintained under various fertility treatments since the 1980s, Dyck will study the interaction and potential benefits of long-term nitrogen and sulphur application and the effect on fertilizer use efficiency.

"Efficient use of fertilizer nitrogen requires an adequate supply of sulphur and other macronutrients (P, K)," said Dyck. "Soil sulphur deficiency may be increasing because of greater frequency of crops with high sulphur demands (canola, pulses) in rotations



University of Alberta research staff collecting samples in the Breton Classical Plots. Photo: Courtesy of Dick Puurveen, University of Alberta.

and because of decreased atmospheric deposition following stricter industry regulation."

The benefits of employing best management practices are twofold: first, they help maximize the efficiency of applied fertilizer, thus contributing to farm profitability, and second, they help avoid negative environmental impacts often associated with fertilizer use. For example, efficient use of fertilizer reduces the amount of nitrous oxide, an important greenhouse gas, released from soil into the atmosphere.

"The goal of this work is to encourage farmers to adopt best management practices to improve long-term fertility and sustainable crop production as well as to meet the increasing environmental performance demands required for market access."

The project is being co-funded by the Alberta Wheat Commission and the Alberta Crop Industry Development Fund, with a total funding contribution of \$124,000.

Information on this initiative and others in AWC's research portfolio can be found at albertawheat.com/research. Check back for updates.

SUSTAINABILITY BEGINS AT THE FARM

By Erin Gowriluk

More and more, we are hearing from multinational companies like McDonald's, Unilever, Kellogg's, General Mills and Anheuser-Busch that their customers are demanding products that contain sustainably sourced ingredients. In response to these demands, these companies have developed key performance indicators or "sustainability metrics" that will be applied to the entire supply chain, starting at the farm.

So what does sustainability look like at the farm level? How will these metrics be applied to on-farm practices? How do we know what, if anything, needs to change about the way we farm in order to maintain access to key export markets? The answer is that we don't know—but we'd like to find out.

In March 2015, representatives from Alberta's four crop commissions—Alberta Barley, the Alberta Canola Producers Commission, Alberta Pulse Growers and the Alberta Wheat Commission—underwent on-farm assessments in three major, internationally recognized sustainability certification programs.

The first program was the International Sustainability and Carbon Certification (ISCC) PLUS. The standard seeks to demonstrate farmer compliance with global sustainable agriculture requirements. It is certifiable by independent certification bodies, recognized by the global market and employed by farm groups across North America. The European Commission recognizes it as one of the first certification schemes to demonstrate compliance with the European Union's renewable energy directives.



AWC director Kevin Bender and Control Union auditor Doug Higgins during Higgins's sustainability assessment for the Alberta Crop Sustainability Certification Pilot Project. Photo: Rob McMorris.

The second program was the Sustainable Agriculture Initiative's Farmer Self Assessment 2.0. This platform is the main food and beverage industry initiative supporting the development of sustainable agriculture initiatives worldwide. The organization strives to develop sustainable agriculture through a continuous improvement process that allows for a more flexible adoption by farmers. Relevant members include Anheuser-Busch, Heineken, Kellogg's, General Mills and McDonald's.

The third and final program included in the on-farm assessments was the Unilever Sustainable Agriculture Code. This scheme was developed in 2010 as part of Unilever's continuous improvement efforts. It was created and tested by a network of practical agronomists, farmers, consultants and sustainability advisors, and is applied to agricultural raw materials sourced by Unilever.

The purpose of this project is threefold. First, our farmer members

want to better understand consumer expectations around agriculture and sustainability, and we believe that these consumer-driven programs are the most efficient and effective means to collect that information. Second, farmers also want to contribute to this important conversation, and this project will prepare them to address consumer expectations in relation to the on-farm practices employed in modern agriculture. Finally, we want to assess farmer readiness. These sustainability programs are not about satisfying a niche market. Farmers' ability to satisfy these requirements will determine whether or not they can access major markets in the future. Project results will identify any gaps or areas where farmers could consider making some changes. We are very confident that Alberta farmers are poised and ready to meet the challenge, and that will be demonstrated in the many improvements that have already been made on farms across the province over the years.

SERVING ALBERTA'S WHEAT PRODUCERS

Mandated by Alberta's Marketing of Agricultural Products Act and funded through a mandatory, refundable check-off, the Alberta Wheat Commission has established our place as an organization that serves, guides and helps shape the evolving wheat industry on behalf of 14,000 wheat producers in our province. Our mission is to increase the long-term profitability of wheat and Alberta wheat producers. We carry out our mission through our four program areas, led by our management team and guided by our farmer directors and regional representatives.

RESEARCH

Through our research program, AWC is investing over \$1.7 million per year in innovative research and development that aims to meet customer requirements and sustain the reputation for high-quality ingredients that Alberta-grown food is known for. Our key priorities are improving genetics, agronomic performance, and resistance to diseases and pests.



MARKET DEVELOPMENT

AWC plays a key role in building the Canadian wheat brand and developing international markets as part of a larger "Team Canada" approach. Canadian wheat is known on the world stage for its high quality parameters, and, subsequently, approximately three-quarters of Canadian wheat is exported to key markets such as Japan, Southeast Asia and the United States. We are also proud to continue building relations with Canadian markets to ensure that Canadians have access to the high-quality food grown in their own backyard.

Another major initiative led by our Markets team is development of a new website, that will significantly improve farmers' ability to make well-informed marketing decisions and maximize the value of their crops. Known as PDQ, short for Price & Data Quotes, the site will provide information on cash grain prices for a broad range of commodities as well as data on grain movement and trade. A test version of PDQ has been established at pdqinfo.ca.



GOVERNMENT RELATIONS AND POLICY

AWC has an active hand in collaborating with our federal and provincial governments, as well as partnering organizations, to identify policy issues and develop advocacy initiatives that help address issues faced by producers. Through these initiatives, our policy program also strives to encourage investment in Alberta's wheat industry.

Over the past year, AWC has focused its policy and government-relations efforts primarily on key national issues affecting producers, including rail transportation, crop-variety registration in Canada and amendments to the *Plant Breeders' Rights Act*. We are also building our place in the on-farm sustainability conversation by leading the Alberta Crops Sustainability Certification Pilot Project in collaboration with Alberta Barley, the Alberta Canola Producers Commission and Alberta Pulse Growers. This initiative will assess producers' readiness to meet growing consumer demand for sustainable food production.




COMMUNICATIONS, GROWER RELATIONS AND EXTENSION

Our Communications and Grower Relations program is integral in building the AWC brand by actively communicating the initiatives we lead and collaborate on with our 14,000 farmer members. We also have a visible presence throughout the year at trade shows, crop walks and conferences, making ourselves available to both our farmer and consumer audiences.

AWC recognizes that the continued development of both current and prospective farm leaders is critical to the future of the wheat industry. This means we have made it a priority to provide education and scholarship opportunities, share knowledge, and encourage skills development in people of all ages.



GROWING VALUE GROWING RESULTS

 @albertabarley | albertabarley.com



Marketing and events co-ordinator, Lauren Reid, brings Alberta Barley to agriculture events across the province.

BRINGING AGRICULTURE TO THE BIG CITY

By Sydney Duhaime

Like most people born and raised in the city, Lauren Reid, marketing and events co-ordinator for Alberta Barley, was a relative newcomer to agriculture.

"I didn't come from a farming background," the Calgary native explained. "As a city kid, you don't often think about where your food comes from."

However, after a year at Alberta Barley, Reid has quickly learned how much of an impact agriculture has on the daily lives of Albertans. "From seeding to harvest, and how our food gets to the grocery store, it's incredible how complex and multi-faceted the whole process is," said Reid. "However, as a consumer, these

were the things that rarely crossed my mind."

Nowadays, Reid is working to change that. As the face of Alberta Barley at events across the province, she has the unique opportunity to interact with the general public and introduce barley to kids and adults alike.

"We attend a lot of educational events across the province," Reid explained. "Our largest educational events are Agrium's Ag-tivity in the City during the [Calgary] Stampede and Aggie Days in Calgary and Lethbridge, and City Slickers in Stony Plain."

These events are a great way to connect with kids and parents and explain how their food gets from farm to plate, Reid said. "It's an opportunity to dispel myths about agriculture and talk about the health benefits of

barley. People are often surprised at how versatile barley is and that this local food can be used for more than beer and soup."

But the benefits don't end there. With the lines of communication open, consumer events are also a great way to exchange knowledge and ideas with an inquiring public. After all, people have questions—and the world of agriculture is always happy to provide the answers.

"These events bridge the gap between farmers and consumers," said Reid. "They provide a place where farmers and consumers can come together to have a conversation about their food."

For more information on Alberta Barley's upcoming events, visit albertabarley.com.



EXPLORING THE UNKNOWN

By Gen Handley

Creating new barley varieties can be a deeply personal experience for breeder Patricia Juskiw. "I always say that these plants are like my children, and I'm disappointed when they don't do well," she said, laughing. "And I'm also very happy when they do go to market and become something."

One of the "children" doing well is the Canmore variety, which, thanks to the help of Alberta Barley, had its marketing rights licensed by Canterra Seeds in 2013. Japan's Sanwa Shurui partnered with Alberta Barley to find a suitable barley variety to make shochu, a distilled alcoholic beverage that outsells the popular sake in the Land of the Rising Sun.

"It's a very popular liquor," said Garson Law, Alberta Barley's research manager. "But there isn't enough barley grown in Japan to meet the demand, so there is an excellent opportunity for Canadian barley growers."

The shochu barley project, funded by Alberta Barley, was an excellent



The Canmore barley variety near the end of the growing season.

opportunity to combine the Commission's top priorities: research and market development. Started in the early 2000s, the project aimed to look at 15 to 20 varieties of barley for the spirit each year. While some varieties have shown promise, Canmore is the

only one that has reached the level of commercial development.

"The Japanese market represents a potentially very large export opportunity for Canadian barley," Law said. "The aim of the shochu project is to determine varieties of Canadian

Canmore Breeding: A Brief History

2002



Two varieties, Ponoka and H92013289Z, were crossbred. Their offspring was then self-pollinated and grown in a climate-controlled chamber.

2003



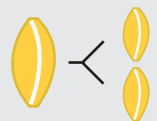
The new seeds were grown in bulk first at the Lacombe Field Crop Development Centre and then in California. Two hundred heads, the portion of the plant that contains the seeds, were selected to continue testing.

2004



The selected seeds returned to Lacombe to be grown and stored for the next season.

2005



These seeds spanned two more generations and were planted into rows. The top 30 rows were selected for harvest and studied for their feed and malting quality.

barley that are suitable for making shochu.”

Brent Derkatch, director of operations and business development at Canterra Seeds, said Canterra was very impressed with the barley variety. “The variety has a very strong agronomic package and it yields really well—in fact, it’s one of the highest-yielding barley varieties available,” he said. “It also has very strong straw, meaning it has improved lodging resistance, and this is a very important characteristic for farmers. Additionally, quality tests so far have shown it to have very plump kernels with more starch, which is desirable for shochu manufacturing.”

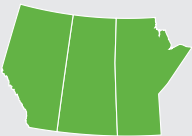
With the project, Alberta Barley and its partners are developing modern ways to look at a traditional beverage. “We’re trying to determine what properties create a great-tasting, fermented product,” Law explained. “It’s the big unknown, the crux of our research project.

“This is a centuries-old process that has always been conducted at the local level by independent distilleries. For the first time, we’re looking at the underlying chemistry behind shochu, and that’s exciting,” said Law. “In the past, we didn’t have the analytical



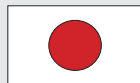
Barley breeder Patricia Juskiw stands in front of test plots of Bentley and TR10694 (Canmore). Photos: Field Crop Development Centre, Lacombe.

2006-2009



The seeds were grown in Lacombe and across Western Canada for yield testing.

2010



Japanese company Sanwa Shurui Co. Ltd also selected this new variety for further evaluation in shochu production.

2011-2012



Sample testing continued.

2013



The test variety was recommended for registration. In Canada only registered varieties can be sold to farmers for mass production. Canterra Seeds received the marketing rights for the test variety and named it Canmore.

2015



Canmore is in production to increase stock and is expected to be available for the 2016 growing season.



capacity to study those components, but now we do.”

By developing different barley varieties, the industry is delivering a product that will meet demand and cater to consumers’ preferences.

“Consumers and end users demand the best—they appreciate quality ingredients more than ever,” said Derkatch. “We are starting to see more interest from companies like Sanwa Shurui to get involved in the development and production of their ingredients—they are also seeking to understand the quality characteristics of their ingredients and how that impacts their product. In the long run, that means varieties like Canmore are

viewed more as ingredients and less like commodities.”

Though Canmore was originally tested for both malt and shochu production, it ultimately did not meet the requirements for malt. However, Canmore offers a great mix of starch, protein and other components that make it ideal for distilling into an alcoholic beverage such as shochu.

“I was shocked; I couldn’t believe the alcohol yields we get in this variety. But it also has good-quality traits; it has good pearling traits and good flavours,” said Juskiw. “It really worked out.”

Law explained that while the current market is small, growing barley

for shochu could be a good opportunity for farmers. “It’s a niche market, but there may be farmers out there looking to get into something a bit different.”

But he noted that there needs to be export infrastructure in place in order for growers to benefit. “Canmore could pave the way for that,” said Law.

As for Juskiw, she believes Canmore wouldn’t be where it is without Alberta Barley’s help. “Canmore itself, and it being released as a food barley, wouldn’t have been possible without Alberta Barley—they helped it get registered,” she said. “Once it was registered, it was kind of like getting an award of merit—pretty exciting.”

 Alberta Barley

*Save
The
Date*

2015 ANNUAL GENERAL MEETING
December 9 - 10, 2015
Banff Springs Hotel