FIELD NOTES

FALL 2018 EDITION

Another Year Come and Gone



Some highlights from the past year



It's amazing how quickly the time passes. I feel like I was just writing my report for our annual report from last year and already it's time to do it again.

We have had another busy year at SaskBarley. One of the highlights was seeing the growing opportunity for Canadian barley in global markets, especially China. We know that the country is the most important buyer of malt in the world, accounting for about three quarters of the world trade. And we know that demand is growing in China. Last year it imported 1.7 million tonnes of our malting barley, which equals about CA\$450 million. This is why we have been focusing on market development activities to nurture this arowth.

For example, last summer we played a major role in

hosting a malting barley tour for international malting and brewing companies, mostly from China. The purpose of the tour was to showcase to them our world-class malting barley industry. Several of our Directors, myself included, were able to attend the tour and talk directly with the buyers. It was an extremely positive experience for everyone involved.

Part of growing our global trading relationships however includes making sure we can move our crops. Another one of our priorities over the past year was continuing to advocate for Saskatchewan grain farmers in the area of grain transportation. We participated in several consultations with government and industry to demand better and fair service for farmers. We recently also participated in consultations with the rail companies to inquire about their plans for moving grain this year and urging them to plan for sufficient capacity in order to meet growing world demand.

In the past year, we also increased our investments in our three priority



areas - research, market development and advocacy and advisory projects. We have been working hard with our industry funding partners on a research program through the Canadian Agriculture Partnership. Details on this agreement will be coming in the near future. We also have a significant focus on working with the industry on the acceptance of new varieties both by the domestic industry and Canada's export customers.

We also increased our efforts and spending on advocacy and advisory work. You can see a full overview of these efforts in our annual report, which will be available on our

website in December. We'll also have hard copies of it at our AGM on January 13 in Saskatoon (as part of CropSphere). Speaking of CropSphere, we have put a lot of thought into planning three barley-specific sessions for this year's event, which we think will be useful to you (see Pg. 2 for more specifics).

A big thanks to all of you for your support over another year and we hope to see you at some of the events in the new year.

Wishing you all a safe and happy holiday season and a prosperous and productive new year.

Jason Skotheim, Chair

SaskBarley Newsletter Fall 2018



SaskBarley Board of Directors

Jason Skotheim

(Chair) 306-270-4343 jason@skotheim.ca

Brent Johnson

(Vice-Chair) 306-725-3228 boverjexcavating@yahoo.

Cameron Goff

306-544-2790 c.b.goff@sasktel.net

Allen Kuhlmann

306-582-2001 skuhlmann@sasktel.net

Zenneth Faye

306-675-4926 zfaye@sasktel.net

Keith Rueve

306-231-7420 keithrueve@live.ca

Malting Barley Insurance Program for Saskatchewan Barley Producers

This past February we were pleased to announce that a malting barley insurance program (Contract Price Option) was made available to Saskatchewan barley producers, through the Saskatchewan Crop Insurance Corporation (SCIC).

SaskBarley had been working to develop such a program with the SCIC for several years, as our Board felt this project was closely aligned with our overall goal of ensuring the long-term profitability of barley for Saskatchewan producers, as well as making it a competitive crop choice in our province.

For more information on the program, please visit: www.saskcropinsurance. com.



IDEAS, INNOVATION AND KNOWLEDGE

CROPSPHERE 2019 - JANUARY 15 AND 16

Location: TCU Place, Saskatoon (35 - 22nd St E)

Hosted by: SaskBarley, Saskatchewan Pulse Growers, SaskFlax, SaskCanola, SaskOats, and Sask Wheat **SaskBarley AGM:** Monday, January 14 from 1:15 p.m. to 2:30 p.m. in Gallery A of TCU Place

FEATURING SPEAKERS:

Brad Wall

Former leader of the Saskatchewan Party and 14th premier of Saskatchewan

Katie Dilse

North Dakota farmer and motivational speaker

Michael Landsberg

Former Host, TSN's Off the Record, mental health advocate and founder of SickNotWeak.com



REGISTRATION:

Early registration:

\$200 – Available from November 1 to 30, 2018

Regular registration:

\$225 – Available from December 1, 2018 to January 4, 2019

Registration at the door: \$250 One-day registration: \$225

For more information visit CROPSPHERE.COM



Barley sessions at CropSphere 2019

January 15

10:15AM Grow better malting barley

Drew Sharp, Rahr Corporation

This session will provide insight into what maltsters look for in malting barley, including specific specs, and will discuss how farmers can better grow crops to meet these specs, as well as some of the most common reasons malting barley gets rejected.

11:25 Barley market outlook

Panel: Kenric Exner, Viterra; Drew Sharp, Rahr Corporation; Derek Squires

What does current demand for barley look like globally? And what will it look like going forward? These are some of the questions that will be addressed by this panel of experts, designed to bring you a 360-perspective on the world of barley demand.

January 16

9AM Best practices for growing barley in Saskatchewan Melissa Silvernagel, Cargill Malt

Cargill's in-house barley agronomist will share insights in best management practices for producing your best barley crop in Saskatchewan growing conditions.

Upcoming Events

CropSphere 2019

January 15 & 16, 2019 TCU Place, Saskatoon

CropSphere 2019 will be held at TCU Place, in downtown Saskatoon, with host group AGMs taking place Monday, January 14.

Visit www.cropsphere.com for a full agenda and registration information.

SaskBarley AGM 2019

January 14, 2018

1:45 PM, Gallery A, TCU Place, Saskatoon

SaskBarley's 2019 annual general meeting (AGM) will take place at 1:30 PM, Monday, January 8, 2018 in Gallery A, TCU Place, Saskatoon.

Please note, if you are attending the AGM and are NOT registered for CropSphere, please stop at the Conference Registration Desk on your way in to pick up your "AGM ONLY" attendance pass.

New this year, we will be combining registration efforts for the SaskCanola, SaskFlax and SaskBarley AGMs.

The schedule is as follows:

- 11AM Registration for all three meetings
- 11:30AM SaskCanola AGM
- 12:30PM Lunch Guest Speaker: Michael Landsberg
- 1:45 PM SaskBarley AGM
- 2:30 PM SaskFlax AGM

Please note, registration will also be available in advance of each individual meeting

3 SaskBarley Newsletter Fall 2018



Global market outlook

A look at the all the global factors affecting markets this coming year

It's going to be an unusual year for barley markets, with price discovery lugging many moving parts.

Even if Canada's 2018 barley production ends up around 8.5 million metric tonnes (MMT), as opposed to Statistic Canada's estimate of 7.9 MMT, domestic barley would still need the help of feed substitution from United States (U.S.) corn imports and wheat to reach that goal.

Furthermore, since we are seeing a strong global barley situation right now, there is risk that Canadian barley exports for malt and feed this year could remain around 2 MMT, the same as last year.

Here are some further considerations:

Exports

Saudi Arabia recently bought 1.5 MMT of feed barley at an average price of US\$261 per tonne, landed for late 2018 shipment. Canada won't participate in this business because of Saudi's import ban, but if we did and grain companies were content with a standard \$80 per tonne all-in margin and cost from loaded boat Vancouver to a Saskatchewan elevator, the delivered price could be about \$4.50 per bushel in the western half of Saskatchewan.

This large export sale sets the precedent for other destinations, with price support linked to sub-par grain crops in Europe and Australia. China should continue to show interest in importing barley because unlike sorghum or Dried Distiller Grain, barley has not yet fallen victim to random adverse Chinese import policies. However, China can be nimble with their purchase behaviour. If the barley price gets too high, China can incrementally reduce purchases and use more rice or wheat as a malt adjuvant. That's why Saskatchewan malting barley prices have stalled in the \$5/bushel range.

The power of substitution

The job of the world barley market is to ensure there is sufficient supply for importers like Saudi Arabia or China, markets which absolutely must have barley. This is why domestic barley is more expensive than corn or wheat in exporting countries. This frees up sufficient barley for export via substitution.

Corn

U.S. corn imports are competitive with southern Alberta but the U.S. is favoured because it's expecting a record yielding corn crop. Furthermore, a smaller crop size in southern Alberta means

Spot 1CW Feed Barley Cash - Lethbridge



that grain shippers won't have as much local grain to ship for export, which inflates interest in importing corn and transloading it into domestic channels. Upwards of 200,000 tonnes may have already been traded for 18/19.

This doesn't offer a complete domestic fix, but rather gives users another choice without needing to bid barley higher. The southern Alberta barley price, less the truck freight into Saskatchewan, is a natural arbitrage.

Quality

A slower harvest speed, especially in the northern prairies, increases the risk for downgraded quality. For barley, that means less malt and more feed. For wheat, this initially means more No. 3 Canada Western Red Spring. The poor weather would need to persist longer to create sprouting and more feed quality wheat. The outcome of the harvest will be critical to local feed barley price

discovery.

Wheat

Wheat is incrementally competitive most everywhere, in part because of recent price weakness and a narrow spread between wheat types and qualities. Wheat is needed to fill gaps everywhere because it is impossible to logistically service all of Western Canada with U.S. corn imports. The lowest priced wheat (that otherwise could be exported) will help with barley substitution. As such, barley prices don't need to be higher than that substitutable choice. This speaks to feed barley outlook: for domestic barley to make new highs, export wheat must lead and do the same.

Malting barley

In a normal year, domestic and export markets requires about 2-2.5 MMT of quality malting barley from Western Canada. Cherry picking and adjusting quality

Continued on back page



Driving demand

SaskBarley helps host tour for Chinese malt buyers

There has been increasing interest in recent years in Canadian malting barley among international malting and brewing companies, particularly in China.

the CMBTC. "It's important for these companies to visit Canada to see our world class farming operations and to meet the producers with generations of knowledge million.

"The tour is not only an opportunity for these buyers to make connections with members of our local industry and to learn about

international buyers on board with testing and ultimately purchasing new varieties will be critical to transition away from the older and less competitive varieties."



Members of the international malting barley industry visited Saskatchewan this past August, hosted in part by SaskBarley.

In order to help drive demand, the Canadian Malting Barley Technical Centre (CMBTC), initiated a tour this past August to showcase the Canadian barley industry to malting barley buyers from China, and to build partnerships for the Canadian industry.

The tour, co-hosted by Alberta Barley and SaskBarley, took place in Alberta and Saskatchewan and included 15 representatives from six of China's largest malting and brewing companies, including Tsingtao, China's second largest brewer.

"In 2017 China was the largest buyer of Canadian malting barley," says Peter Watts, Managing Director for

5

and experience."

One of the mandates of the CMBTC is to support marketing of Canadian malting barley to international customers, and to introduce them to new varieties and their attributes from a technical perspective. Building and maintaining strong relationships with the industry in China through crop tours will help ensure there is continued and increasing demand for Canadian malting barley.

China is the world's largest purchaser of malting barley, accounting for 75 per cent of global trade. In 2017-18 China imported 1.7 million tonnes of malting barley from Canada, valued at approximately CAD \$450 our industry, but also to give them the invaluable experience of seeing it first hand," Watts says.

The Chinese buyers had the opportunity to visit several farms growing malt barley and to meet the producers, their families and other members of the farm associations. This made the tour a personal and intimate experience, all while showcasing Canadian hospitality.

"In recent years, China's purchases have been primarily AC Metcalfe and CDC Copeland, so this tour was an opportunity for the buyers to see newer varieties such as AAC Synergy, CDC Bow and AAC Connect," stated Watts. "Getting

The CMBTC believes crop tours are an important vehicle to communicate how Canada is working to produce and deliver the highest quality malting barley in the world. "For customers from China, this is extremely important and will give them confidence that Canada is a partner in the success of their business. Ultimately this will help to drive value and continued growth for our product in China," say Watts.

The tour was sponsored by Alberta Barley and the Saskatchewan Barley Development Commission, as well as by the CMBTC's grain company members including ADM, Cargill, Richardson and Viterra.



China seeks high protein malting barley

It's important for our industry to know the range of protein levels desired by the global marketplace

In Canada, when a producer's barley is selected for malting use by maltsters or grain companies, it needs to satisfy a number of quality characteristics.

Of these quality parameters, protein content is arguably the most important next to germination. Barley will often be rejected by the selector if protein is outside the range specified by the malting and brewing companies, even if it has otherwise excellent quality.

Barley protein content is primarily the result of genetics and growing conditions; the latter includes weather (rainfall, temperature and solar radiation), soil type, nitrogen fertilization (application rate and time), crop rotation and disease pressure.

Protein plays an important role the final product

From a malting and brewing perspective, protein in barley is critical as it offers components such as enzymes, Free Amino Nitrogen (FAN) and soluble protein, which in turn influence the malting process, the quality of finished malt, the malt performance during brewing and the final beer quality.

Barley with higher protein content generally results in malt with higher levels of

Main specifications required for selection:

• Germination: Minimum 95%

• Moisture: 10 - 13.5%

• Plump kernel size: Minimum 80%

• Protein: 10%-12.5% (or higher for export markets)

• Varietal purity – Minimum 98%

• Free from significant disease, sprout damage

soluble protein, FAN and enzymes.

Different brewing segments, different protein requirements

In general, different brewing practices and types of beer produced require different

to select barley with protein content that will enable them to produce malt that will satisfy the brewers' requirements.

The optimal protein content in malt (which is generally 0.2-0.4% lower than the original barley) will range

How protein affects the malting/ brewing process

- Soluble proteins contribute to malt colour and flavour and affect fermentation, beer foam, mouth feel and shelf-life.
- FAN is a portion of soluble protein that provides nutrients to yeast to ensure normal growth and fermentation.
- Enzymes are a group of specific proteins in barley which, during malting and brewing, facilitate the breakdown of starches and beta-glucan into fermentable sugars and proteins into smaller proteins such as peptides and amino acids.

quality specifications for malt, and the optimal levels of these proteinrelated components varies depending on the brewer. As a result, maltsters needs

depending on the brewing segment or style. All-malt (craft) brewers tend to like lower malt protein content (9.5-10.5%) while the

macro-brewing (adjunct) industry in North America general prefer medium levels (10.5-11.5%). While in China the brewing industry favours higher protein levels, requiring a minimum 11.5% with a preference for 12-12.5%.

Higher protein levels in barley are important for the latter two categories, which are often adjunct brewers using corn, rice or syrups in combination with barley malt. At the same time if protein levels are too high there are can also be negative effects, particularly for all malt or craft brewers, in the form of yield loss, higher (darker) colour and lower extract yield.

Canada has higher protein than other origins

Canadian barley naturally tends to have higher protein content than barley from other countries such as Australia and France due to our soil and climate conditions. But higher protein is also the result of genetics and farming practices.

Canadian malting barley has a good reputation and is generally considered a premium barley in China due in large part to its high protein content. Whether it's for premium beers using rice as an adjunct or economy beers using



liquid syrup adjunct (corn syrup), both require good levels of soluble protein and FAN in the malt along with high levels of enzymes for brewing.

In other words, China wants and needs high protein barley, and Canada is in a position to deliver it.

Historically, the messaging around malting barley in

what has changed?

The difference today relates to the distribution of demand for Canadian malting barley. Whereas previously the majority of Canadian malting barley was going into the Canadian malting sector and to the United States, as of 2017-18 China emerged as the top purchaser of Canadian malting barley. And the message coming

consider it to be premium quality due in large part to higher protein content than other origins.

Moving forward, with China as Canada's largest market for malting barley in 2017-18 and poised to be so again in 2018-19, the industry must work together to ensure we are meeting the varied demands of different market segments.

Of course we can't control the weather during the growing season, which will be a key determinant in final barley protein content, but it's important for our industry to know the range of protein levels desired by the marketplace in order to tailor their approach to end-use requirements. This is a difficult task, but also one that is becoming of a



Protein content is arguably the most important parameters when it comes to malt specifications, next to germination, and is becoming increasingly important for global exports.

Canada has focused on keeping protein content down. Producers have been excluded from the selection for barley with protein content that is too high, and breeding programs have sought to produce varieties with lower protein levels. So from China is that they want to see protein content in Canadian barley remain strong due to their high adjunct style brewing.

Over the years China has even been willing to pay a premium for Canadian malting barley because they

Our breeding programs will have to set targets to navigate different quality requirements, and producers may have to adjust their farming practices depending on whether they are delivering into the domestic or international marketplace.

premium grain producer such as Canada.

Peter Watts is the Managing Director of the Canadian Malting Barley Technical Centre (CMBTC).



Continued from page 4

attributes can help with the fix in instances where adversity prevails.

* * *

Overall, it would appear that a \$5 to possibly \$5.50/bushel price, in a deferred delivery position, is a fair malting barley value range.

Feed barley is poised to face headwinds of cheaper corn and any local harvest delay will affect quality. Export wheat is likely to create another push higher later this year. Opposing forces will extend the grind but pressure will continue to mount the longer cheaper corn persists.

Source: Alberta Government & Industry

Greg Kostal of Kostal Ag Consulting Ltd. provides insight on commodity markets and marketing guidance. For more information, please visit www. gregkostal.com

Return undeliverable Canadian addresses to the below address

SASKBARLEY OFFICE:

Bay 6A - 3602 Taylor Street East Saskatoon, SK S7H 5H9 General Inquiries: 306-653-7232 Fax: 306-244-4497

Canadian Publication Mail Agreement # 42883517

SaskBarley Newsletter Fall 2018