

September 2018

PULSE•POINT

MARKETING YOUR 2018 PULSE CROP

Out With the Old Crop and In With the New
Transitioning into new crop storage

It Is All About the Grade
Key considerations growers should know before selling their pulses

Market Opportunities for Pulses in Foodservice
Large volume foodservice can help increase demand for lentils in the U.S.

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Chair's Message

Directing the programs
and initiatives most
interesting to growers

BY COREY LOESSIN



EVERY GROWING SEASON COMES WITH SOME CHALLENGES and 2018 is no different. Most of us started the season with very limited soil moisture. Some timely rains in June reached some areas, while others continued to be too dry. As I write this, we are short of moisture after a spell of hot days.

I would say that the most prevalent issue I have heard and read about is the continued problem of root rot in pea and lentil crops. Areas that did receive significant rain in early June were most affected. The complex of root rot diseases are now common enough in our soils that rainfall events early in the growing season can manifest in a serious root disease issue getting started in fields. Usually the worst hit fields are those with a history of previous pulse production.

There is breeding research currently going on to try and incorporate some level of root rot resistance into pulse crop varieties. For these soil-borne diseases, it is acknowledged that varietal resistance is the most desirable defense. Other work is also ongoing to try and determine the combination of agronomic tools and practices that are best at limiting the impact of root diseases. No question, this is a huge challenge for our industry, and there is no easy answer. Saskatchewan Pulse Growers (SPG) has, and continues to, commit significant resources to these efforts, fully recognizing the needs of growers to have management strategies to limit the toll root diseases are currently taking in pulse crop production.

This leads me to think how lucky we are as growers to have this organization and the mechanism to generate collective funds to support the needed research and breeding work to combat these issues. While governments contribute, there is a much greater need than government funds will ever address. Grower dollars directed through SPG get allocated to areas of pressing need and strategic importance. So it is really fortunate to have the system we do, and it will lead to management strategies every grower can benefit from.

We as growers also need to be interested and engaged in our crop commissions to take on roles as directors around the board table. That is the surest way to direct the programs and initiatives most of interest

to us. There is an opportunity again this fall for SPG board renewal, and I would encourage you to consider becoming involved as a board member.

I know in my years as a director, there have been several areas where I am truly satisfied with the results achieved from decisions made earlier by our board. One example is certainly the International Year of Pulses, and the market awareness that year and its activities created. The movement to closer alignment among importing and exporting countries on maximum residue limits is another area where SPG board decisions have had a positive influence.

There will always be challenges. Production wise, root rot issues is among the most challenging we have faced. Our board of director system enables the deployment of resources to meet this and other challenges, and find solutions. It is a good system, and I encourage you to be involved.

Sincerely,

A handwritten signature in black ink, appearing to read 'Corey Loessin'.

Corey Loessin
Chair

Executive Director's Message

Creating the future — new market opportunities available for Saskatchewan pulses

BY CARL POTTS



A SIGNIFICANT TOPIC OF DISCUSSION

amongst pulse growers and those in the pulse industry over the past year has been on trade barriers with India. Protectionist measures in India, including fumigation requirements and tariffs on pulse imports, have effectively closed the door to pulses entering the Indian marketplace. India market access remains our sector's top priority. Through our national association Pulse Canada, we continue to press the Canadian government to deliver on the agreement of Prime Ministers Trudeau and Modi in February 2018 to resolve longstanding fumigation challenges by the end of 2018. If achieved, this will allow more predictable trade, once India returns to importing pulses from Canada.

China, which is now Canada's largest market for pulses, has increased imports of Canadian peas in the last year. Pulse processing plants in North America have helped to absorb some of last year's pea production, thanks in part due to the growing interest in plant protein and pulse ingredients in human food and pet food markets. Mexico has increased imports of Canadian red lentils. However, the increased demand in these markets do not yet offset the loss of India. We are taking charge of the future by diversifying demand in new markets so we are not as susceptible to risks in any one market.

With crisis comes opportunity. The opportunity is to build more diversified, stable, and higher value demand than we have now. The current downturn in demand in India has strengthened our resolve to diversify into new-use markets

for 25 per cent of Canadian pulse production, or two million tonnes. We call this our "25 by 2025" goal. The focus of this work is to create new demand for Canadian pulse production so that we are not as reliant on any one-export market.

So how do we create new markets for two million tonnes of production? There are three important areas where the pulse industry can influence demand and drive increased consumption.

The foodservice sector in North America is one of our target sectors for new market demand for pulses. Foodservice is a sector that has the ability to drive high volume consumption of lentils over the shorter term. By creating partnerships with groups such as the Culinary Institute of America, the Canadian pulse industry is working to increase the use of lentils in college and university dining programs across the United States. Often these institutions are each serving 20,000 or more meals a day, and have the ability to increase their lentil usage in the short term. Demand for plant-based protein and interest in nutrition and sustainability are driving growth in foodservice utilization in North America.

Another opportunity to diversify demand for pulses is through the inclusion of pulse ingredients in manufactured food products. As consumers become more health conscious about the food they are buying, the food market is looking to research that demonstrates the nutritional and sustainability benefits of including pulse ingredients into

snacks, biscuits, cookies, and processed meats. The Canadian pulse industry is already experiencing steady growth of yellow pea imports to China, which is being supported by work with food companies and researchers to explore the inclusion of pulse ingredients into traditional Chinese foods like steamed buns and noodles, which has led to increased imports of Canadian yellow peas by China.

The third market of focus is animal feed, pet food, and aquaculture products. Research has shown that including pulses into animal feed and pet food products can provide nutritional benefits to the animals, much like humans. Currently the Canadian pulse industry is undertaking stakeholder consultations, looking at the viability and formulation requirements of including more pulses into these animal foods, as well as identifying the role industry can play in supporting the development of this market space.

While building new demand is a key pillar of our strategic focus, we also know traditional export markets are going to be pivotal to continued profitability in pulse production. We envision a time where we may still supply pulses to price sensitive markets such as India when they want to import, and where producers will not need to rely so heavily on such markets for their livelihood, profitability, and growth.

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Out With the Old Crop and In With the New

Transitioning into new crop storage

BY BRUCE BARKER

BY THIS TIME OF THE YEAR, bins are usually empty and the new crop is moving into storage. However India's tariffs on peas, lentils, and chickpeas have growers holding onto the old crop longer than normal. With some of the old crop still sitting on farm, what is the best strategy for moving new pulse crops into storage?

"Peas are of the least concern for carry-over. They seem to have the best ability to be stored longer if they are at the correct temperature and moisture content," says Dale Risula, Provincial Specialist, Special Crops, with the Saskatchewan Ministry of Agriculture.

A major consideration in deciding which crop to move to market first is oxidation and darkening of the seed coat of some pulse crops. Pulses that contain tannins in their seed coats oxidize over time, and lose colour and grade. These include maple and dun varieties of peas, Desi chickpeas, normal tannin faba beans, and some lentil varieties.

Since discoloration is caused by oxidation and light degradation, storing pulses with tannin seed coats in cool, dry, and dark storage conditions may help lengthen the time before any discolouration occurs.

"With green lentils, you do not want to store over a second summer," says Risula. "Move the old crop out as soon as possible and do not mix the old crop with the new crop."

When handling the old crop (and new crop), moving should be done as gently as possible to reduce chipping and splits. Use belt conveyors instead of augers if possible. If augers are used, run them full but at a reduced speed. Chickpeas have irregular shaped seed and require special care to keep from breaking the exposed beak area, and to ensure seed coat integrity is not damaged says Risula.

New Crop Storage

Dry and cool is the mantra for grain storage, and that includes pulses. Follow the

Canadian Grain Commission's (CGC) seed moisture content specifications. At CGC dry grade, most pulses will be dry enough for safe storage.

However, even if the crop went into the bin dry, safer storage can be achieved if the bin is cooled with aeration. The target temperature for all grains, provided they are dry, is 15°C or lower.

For example, using the safe storage charts (Tables 2 and 3), peas at 14 per cent moisture content and at 20°C temperature could be safely stored for about 28 weeks. If the temperature was cooled to 10°C, peas could theoretically be safely stored for 95 weeks.

Preliminary Research

At the Prairie Agriculture Machinery Institute (PAMI) at Humboldt, Saskatchewan, Dr. Joy Agnew, project manager, is working to fill a knowledge gap in managing pulse crops once they go in the bin.

Canadian Grain Commission Moisture Specifications

	Peas	Green Lentils	Red Lentils	Faba Beans	Chickpeas	Dry Beans	Soybeans
Dry	< 16%	< 14%	< 13%	< 16%	< 14%	< 15%	< 14%

Peas – Number of Weeks for Safe Storage of Peas at the Specified Grain Moisture Content and Storage Temperature

	Moisture Content (%)				
	12	14	16	18	21
Storage Temperature (°C)	Maximum Safe Storage (weeks)				
26	31	16	7	4	2
20	55	28	13	7	4
16	100	50	20	12	6
10	200	95	38	20	21
6	370	175	70	39	20

Source: Sokhansanj, 1995

Lentils and Chickpeas – Suggested Number of Weeks for Safe Storage at the Specified Grain Moisture Content and Storage Temperature

	Moisture Content (%)					
	12	13	14	16	18	21
Storage Temperature (°C)	Maximum Safe Storage (weeks)					
25	31	16	13	7	4	2
20	55	28	23	13	7	4
15	100	50	40	20	12	6
10	200	95	80	38	20	21
5	370	175	150	70	39	2

Source: Extrapolated from pea data, Sokhansanj, 1995

As moisture levels decline especially in Kabuli types, chickpea seed begins to shrink from the seed coat and are more susceptible to damage in handling at less than 13 per cent.

“There has been some baseline work done over the years to establish drying and wetting characteristics of pulses, but it has never been validated or widely adopted,” says Agnew.

The first of two years of research was completed in 2017. The goal is to validate equilibrium moisture content (EMC) charts for peas and lentils, to assess airflow rates on natural air drying, and to determine resistance to airflow in pulses. EMC charts can be used to predict how the ambient air used for natural air drying will affect the moisture content of grain. It takes into

account the air temperature and relative humidity of the air. PAMI currently has EMC charts posted on their website for peas, lentils, and soybeans.

The PAMI research will help producers store pulses safely, but also minimize the risk of over-drying by having updated EMC charts. Agnew says over-drying can cost producers as much as 20 cents per bushel in lost bushel weight. An additional goal is to collect baseline data on how repeated wetting and drying cycles affect seed quality over long-term storage.

In 2017, various airflow rates in bench-scale bins for peas and lentils were tested, and eight on-farm trials also collected information on static pressure across the fan, grain depth and volume, and moisture content. In 2018, the bench-scale research will be conducted along with expanded on-farm trials.

Agnew says preliminary data from the first year indicates that, “Airflow rate definitely affected drying rate. Kernels from the middle of the bin had a poorer germination rate than those near the plenum.”

After pulse crops are dried and cooled to recommended storage conditions, monitoring for moisture build-up, heating, or spoilage should be conducted frequently.

Monitor the Bin

After pulse crops are dried and cooled to recommended storage conditions, monitoring for moisture build-up, heating, or spoilage should be conducted frequently. Risula says pulse crops have a tendency to sweat after being placed in storage. The seeds continue to respire after going into storage and release water as a vapour that can migrate and accumulate in concentrations high enough to cause spoilage.

Monitoring is especially important for large Kabuli chickpeas because seed testing dry can sometimes hide seed with higher moisture levels internally in the grain mass.

"Peas, lentils, and chickpeas are usually off the field early enough in the fall that the air is warm and dry, which can help with natural air drying if the crop was taken off tough," says Risula. "The important thing this fall is to get the new crop cooled down as quickly as possible." •

Bruce Barker is a Professional Agrologist, and writes about agriculture from his straw bale house in the foothills of Alberta. He can be reached at bruce@haywirecreative.ca

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Cash Advance Grain Loans

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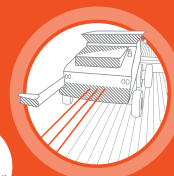
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- Submit your application by email or fax.
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For more information, refer to the FAQs or your cash advance application at: ccga.ca/cash-advance/.

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Couple Feels Service Work Vital Part of Farming

Radisson farm couple feels it is important to give back to an industry that has given them much

BY SEAN PRATT,
THE WESTERN PRODUCER

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ON THE FARM Joan Heath is a director with Cereals Canada and Corey Loessin is chair of Saskatchewan Pulse Growers. It is not nearly as rare as it used to be to find a woman on the board of directors of a farm organization. What is extremely unusual is to find a woman and her husband serving on separate boards at the same time.

Joan Heath and Corey Loessin are doing just that. They have a long history of board service and both have chaired farm organizations at some point. The couple, from a farm near Radisson, Sask., feels it is incumbent on them to give back to an industry that has given them so much.

"I really have a lot of respect for some of these early guys who developed these crop commissions and served on them for no remuneration and had the vision to get it set up in the first place," said Loessin, who is chair of Saskatchewan Pulse Growers.

Heath agrees that it is a way to pay homage to the selfless visionaries who gave farmers a voice by donating their time and energy to

a worthwhile cause, often at the expense of their own farms.

"A lot of the younger generation just take it for granted that you just have what you have," she said.

Heath grew up on a cattle farm near Dauphin, Manitoba, and got a home economics degree from the University of Manitoba. Loessin's roots were on a farm located only a few kilometres away from where they live now. He earned a Bachelor of Science in Agriculture degree at the University of Saskatchewan (U of S).

The two met when they were both working for Alberta Agriculture following graduation.

In 1991, they decided to buy a farm in Saskatchewan because Loessin got a job teaching crop science courses at the U of S.

Heath said the farm economy was depressed and coming off a devastating drought in 1988, which provided the ideal opportunity to enter the business.

"No one else bid on our home property here. It is inconceivable now to think of that because it is so aggressive now," she said.

There were many lean years that followed including their second year on the farm when their crops were wiped out by a devastating frost and a skunk killed most of their chickens. The couple had to rely on off-farm jobs to pay the bills. Heath got a job as executive director of the Saskatchewan Canola Growers Association.

"That was really my big break," she said. "That was when I learned everything about everything really. Those guys were young and aggressive on that board and treated me like I was one of them."

The experience made her believe she could one day serve on a board as a woman.

After five years she quit the job because the couple were starting a family. Shortly after that the Saskatchewan Canola Development Commission was formed and Heath agreed to do communication and market

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Corey Loessin (Chair of Saskatchewan Pulse Growers) and Joan Heath (director with Cereals Canada) pictured with son Aiden and Audra are hoping to inspire the next generation of involvement in agriculture organizations.

development work for the commission from her home.

Most modern organizations have a wall between the board and the staff but that was not the case with the commission.

"I got in on lots of stuff and was sometimes almost treated like a board member in terms of asking my opinion," she said.

The experience paved the way for her eventually becoming a board member of the commission with stints as vice-chair and chair.

She has also served on the boards of the Saskatchewan Wheat Development Commission, Agriculture in the Classroom Saskatchewan, the Prairie Spirit School Board of Education, and is currently a director with Cereals Canada.

Loessin got into board service a lot later because in the early years he was too busy building a farm, working off-farm, raising livestock, and helping take care of their children, Audra and Aidan.

In the beginning, they farmed with Loessin's family but now it is an independent

operation. The couple got out of the cattle business in 2006 and now operate a 3,000-acre grain farm. By 2012, the workload was more manageable and Loessin felt he could devote time to helping shape farm policy for future generations.

He decided to run for a position on Saskatchewan Pulse Growers because he had been growing pulses since the early 1990s and had a keen interest in the agronomy work going on with the crops. But he soon learned there was a lot more to sink his teeth into than research projects, such as policy and market access issues. And he discovered that fixing things and making changes is more difficult than it is back on the farm.

"You have to go in with a learning attitude and an attitude that things just take a while to change," said Loessin, who also sits on the board of Pulse Canada.

The rewarding part of the job has been those moments when he felt he made a difference, like when he provided a farmer perspective on what changes needed to be made at the Pest Management Regulatory Agency during a parliamentary review of the organization.

"There was a number of MPs that really took notice of what growers were saying and I think that influenced the outcome of that review," said Loessin.

Heath said she has no plans to continue with board service after her stint at Cereals Canada is over.

"I think you have to recognize when you have stayed too long at the party," she said. And she definitely has no political aspirations. "I am just not diplomatic enough," said Heath.

She wants to make way for new people with new ideas but she knows some farmers are scared off by the idea of attending countless meetings. It is also about meeting new people, forming lasting relationships, and developing a better understanding of the industry that provides them with a living.

"It is not a prison sentence," said Heath. But she has one stipulation for potential applicants for her job. "People on boards still need to be really actively farming, not just dabbling," said Heath. "You have to be all in." •

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Saskatchewan Crop Insurance Grows Benefits Using Big Data

The Saskatchewan Management Plus program helps growers make vital decisions

BY JANE CAULFIELD

BIG DATA IS A HOT TOPIC THESE DAYS

— from collection practices to data uses, people are looking for more ways to turn data into something with value. When it comes to pulse crop information, the Saskatchewan Crop Insurance Corporation (SCIC) has found a way to use grower provided data to support producers in multiple ways.

“Saskatchewan Management Plus (SMP) is designed to give producers actual crop production information to help make more informed farm management decisions, and help SCIC maintain, develop, and enhance crop insurance programs,” says Christie Wolf, Research Analyst at SCIC.

Through SMP, SCIC collects information on a wide range of data points including crop and variety, land use, seeding date,

chemicals/fertilizers applied, average grade produced, and yields. Because data is submitted directly by producers, the available results are extremely relevant to producers.

“All SMP data is available on our website, where producers can access and compare how varieties perform in their area,” says Wolf. “This data, along with the collective data of producers in each risk zone, can help producers plan crop rotations, budgets, and crop performance comparisons.”

Wolf says that participation has no associated costs and is entirely voluntary. Growers receive an individual summary sheet automatically if they supply crop yields by legal land description on their production declaration, and any individual producer information is kept confidential.

Individual data becomes part of a larger database that provides producers with average results based on risk zone or by province. This means that the more producers who participate, the better the information is.

“Consider the number of field pea varieties on the market today,” says Wolf. “The vast number of choices makes your decision very difficult. With SMP, you will have additional and local information that will help you make your choices. You will be able to choose the variety most suited to your area.”

The data provided becomes part of a larger database that can provide average results based on risk zones or by province, which growers and users can access to see average results in risk zones or by province, but not individual field data.

More Benefits to SMP Than Meet the Eye

Sherrilyn Phelps, Agronomy Manager for Saskatchewan Pulse Growers (SPG), says that there is a lot of benefit for producers to participate.

"The data is valuable to the grower as they can track individual field results over time," says Phelps. "It also goes into a database that can provide information for the risk zone and the province. This combined data can be very powerful but is only as good as the data going into it."

The information producers receive can be used to plan what varieties to plant and can also help growers determine what crop does better on what stubble so they can make more informed choices in crop rotations.

While the available data helps producers plan future crop rotations, maintaining an on-going database provides opportunity for the development of new technology and creates valuable research opportunities.

"Investments in research and technology development are based on priorities and needs of the industry," says Phelps. "The SMP program provides data to the industry to identify areas where more work is needed, where opportunities exist, and to confirm the adoption of technology and increased yields over time."

The SMP program also provides insight to current decisions being made by producers, and can help industry experts respond accordingly, ensuring that pulses continue to be a profitable crop in Saskatchewan. SPG uses the available data to assess trends in yield and variety uptake to ensure they are investing in the development of new varieties that producers will want to use.

"The decision to release a variety is based, in part, on the anticipated agronomic performance," says Laurie Friesen, Seed Program and Research Project Manager at SPG. "During variety development, this is measured in replicated small plots grown at multiple sites over several years. Although this is a good indicator of the potential of a candidate variety in different regions, it is important to assess how this translates to economic success in field scale production at the grower level."



Pulses and soybeans are among many crops that can have their production information submitted to SMP.

**To learn more about the SMP program,
visit saskcropinsurance.com/resources/smp/**

A successful pulse crop relies on a number of variables, and while some are only controlled by Mother Nature, SPG uses the data in the SMP program to ensure they are providing services that help make it easier for growers to turn a profit.

"The success, or lack thereof, of varieties serves as a gauge of how current issues may be influencing grower decisions and how SPG should work towards meeting these challenges for the benefit of the producer,"

says Friesen. "More participation by growers will increase the accuracy of the data and improve the ability to look at regional information. The more robust the database is, the better it will serve as a guide for future variety commercialization decisions which will directly benefit the grower." •

Jane Caulfield is an experienced journalist and writer, and is the owner of Tin Box Digital Content.

It Is All About the Grade

Key considerations growers
should know before selling
their pulses

TRUDY KELLY FORSYTHE

YOU HAVE WORKED HARD throughout the growing season to produce high-quality crops. They are harvested, in the bin, ready to go to market, and you want to get the best price possible. But, how do you ensure that happens?

Daryl Beswitherick, Program Manager of National Inspection Standards, for the Canadian Grain Commission (CGC), says there are a couple of key considerations growers should keep in mind when they are selling their grain. First is who they are selling to. Second is what quality they have before they deliver to the buyer.

Know Your Buyer

Growers should know if they are selling to a licensed grain company or not, keeping in mind that a licensed grain company offers the best protection. "The CGC holds security so if a grain company defaults, growers still can make a claim to be compensated for their grain," says Beswitherick.

Know Your Grade

Growers should also know the grade of their crops before they take samples to the buyer. "Producers should know what quality they have so, when they go to sell their grain,

they know if they are receiving the proper grade for their grain from the buyer," says Beswitherick. "It is really important they know what they have in order to know if they are getting a good deal or not."

Getting Your Grade

There are a few different options available to growers looking for a grade prior to taking their pulses to their buyers. Many third-party grading companies provide grading services for a fee. Producers can also send samples to one of the CGC offices in Saskatoon or Weyburn to be graded for a fee.

There is a free option as well. Growers can get their grain graded and, for pulses, learn the protein content, for free by participating in the CGC's Harvest Sample Program, a voluntary program for Canadian grain producers.

"Growers sign up for the program through the CGC website and we send them postage-paid envelopes to put the grain in," says Beswitherick, explaining for pulses they give an unofficial grade as well as the protein content. Note that the Harvest Sample Program grade is unofficial because the sample size does not meet the minimum

weight requirement of 1,000 grams, and because a CGC grain inspector does not collect the sample.

Beswitherick says the program is a great way for growers to get free information about the quality of their grain, but it also helps the CGC in a number of ways. For one, it allows the CGC to provide quality information concerning Canadian grain to marketing companies. The samples also help the CGC evaluate the different grain grading factors to ensure the tolerances are appropriate and determine if changes need to be made, be it revising grading factors to reflect processing needs, or protect the quality reputation of Canadian grain. The samples also provide the information needed to determine the standard samples used to grade grain for that year. Finally, the samples contribute to CGC scientific research projects, including researching grading factors and other quality issues that may affect the end-use quality of Canadian grain.

"It is better to get as much participation as we can from producers," says Beswitherick, explaining currently pulse crops make up a small percentage of the grain samples they receive each year. Of the approximately 10,000 samples the Grain Commission



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Before pulses make their way to an elevator for delivery, you should know the grade of your crop.

receives each year, 5,000 are wheat, 2,000 are canola, and the rest are other grains, including pulses.

Buyer Grading

With knowledge of the grade in hand from a third-party grading company or the CGC, growers are armed with information when they take their product to market. If they can, having their grain graded by more than one buyer is a good idea. However, it does not always make sense since growers are generally contracted to sell to a single buyer.

Beswitherick says that is why it is important to go to a private, third-party grading company or the CGC prior to delivering their grain. "That way they know what they have in their bin and that they are being graded fairly," he says. •

Trudy Kelly Forsythe is the owner of Cultivating Communications. She can be reached at trudy@CultivatingCommunications.com

Taking Your Sample

A representative sample accurately represents a specific quantity of grain, such as the contents of an entire grain bin. Growers can take a representative sample by combining many smaller individual grain scoop samples into a larger, composite sample.

"By methodically taking individual scoop samples from the truck when filling a bin, growers ensure the composite sample accurately represents an entire bin of grain that can then be used for grading before you make marketing decisions or deliver your grain," says Beswitherick. "By building composite samples that are representative, growers get accurate information about the quality of their crops."

Detailed instructions on how to take a representative sample from a single truck or from multiple trucks are available at www.grainscanada.gc.ca under the Publications and Forms section of the site. Additional resources are available on the CGC's website. www.grainscanada.gc.ca

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World Market View for Lentils and Peas

What does supply
and demand tell us
for the future?

BY BRIAN CLANCEY

ONE BIG QUESTION IS ON THE MINDS OF A LOT OF PEOPLE. Can we reduce inventories of pulses to levels which do not hurt prices?

Answering that question is difficult because the list of buyers has changed. India will not be an important destination for a long time. The earliest will be the fall of 2019, but that depends on how many pulses are planted in the coming winter or rabi cropping season. Many think we might need to wait until 2020 for India to return as a major buyer.

Changes in world demand patterns could run deeper. The United States (U.S.) is picking trade fights with most of its allies and several other countries. This has resulted in retaliatory duties being levied against a wide range of U.S. products, with agriculture a primary target.

India and the European Union (EU) have targeted pulses. India's import duty for U.S. origin pulses is 10 per cent higher than for Canada and other countries, while the

EU has put a 25 per cent duty on kidney and white beans. The European decision has created significant opportunities for Canada's bean industry, while U.S. exporters did not expect to sell much product to India, with the result its increase in import duties has no effect on markets.

What is changing, are trade patterns. So far the impact is only obvious in products like soybeans and cotton. If what looks like a trade war results in economic nationalism in China, Europe, South Korea, or Japan, other products could be affected. If angry canners or packagers try to replace U.S. product with pulses from other countries, Canada could see unexpected shifts in demand.

There is no reason to think this is already happening but there is no reason to believe it could not.

For Canadian pulses, the question is whether the changing world trade environment will result in enough new demand to reduce stocks to manageable levels?

One thing that helps is that pulse prices have returned to a more normal relationship to grains and oilseeds. When you convert prices to an index you discover pulses were at a premium to grains and oilseeds from the end of 2015 to the beginning of 2017. With the index returning to a discount, we are seeing unexpected demand.

The most obvious example is China. Prices for peas reached levels that made them attractive to feed manufacturers at the same time as China threatened to impose import duties on U.S. soybeans, sorghum, and corn.

Enough peas have been sold to China's feed industry since January that this summer's ending stock projections have dropped from over 1 million (M) tonnes to around 700,000.

As long as peas fit in their least-cost formulas, China's feed mills should keep buying. Noodle makers and fractionation plants in China are expected to buy around 900,000 tonnes in the coming marketing

Possible Outlook Scenarios for 2018/19

Peas	Intentions	Low	Medium	High
Area	3,602,900	3,602,900	3,602,900	3,602,900
Production	3,675,000	3,094,000	3,350,000	3,786,000
Carry-In	608,000	608,000	608,000	608,000
Supply	4,283,000	3,702,000	3,958,000	4,394,000
Exports	2,646,000	2,500,000	2,445,000	2,715,000
Domestic	1,029,000	1,052,000	1,010,000	1,070,000
Ending	608,000	150,000	503,000	609,000
Stocks to Use	17%	4%	15%	16%

Lentils	Intentions	Low	Medium	High
Area	3,767,100	3,767,100	3,767,100	3,767,100
Production	2,495,000	2,110,000	2,321,000	2,570,000
Carry-In	775,000	775,000	775,000	775,000
Supply	3,270,000	2,885,000	3,096,000	3,345,000
Exports	1,931,000	1,804,000	1,829,000	1,975,000
Domestic	543,000	580,000	547,000	550,000
Ending	796,000	501,000	720,000	820,000
Stocks to Use	32%	21%	30%	32%

Area is in acres, other numbers are tonnes.

Source: STAT Publishing Ltd.

NOTE: On average the seeding intentions for peas are almost the same as the actual area. Since 2006, the final pea area has ranged between 13 per cent higher than the intentions and 11 per cent lower. On average the seeding intentions for lentils are 6 per cent lower than the actual area. Since 2006, the final lentil area has ranged between 32 per cent higher than the intentions and 5 per cent lower.

year. If the feed industry bought 1 M tonnes, next summer's ending stocks would be lower than this summer's.

Under all scenarios, if demand develops as expected, prices should set their season lows early. Farmers should be selling into demand all year round. Not just export markets, but because more pea fractionation plants are now on stream in Canada and elsewhere.

As bright as things look for peas, lentils could continue to struggle. This year's crop needs to be smaller than all possible scenarios and next year's seeded area needs to drop before stocks will get back to levels which do not have an impact on prices.

As we know, demand can change before our eyes. Farmers in India could drastically reduce land in pulses in favour of other

crops, forcing the country to import green lentils this fall and red lentils next year.

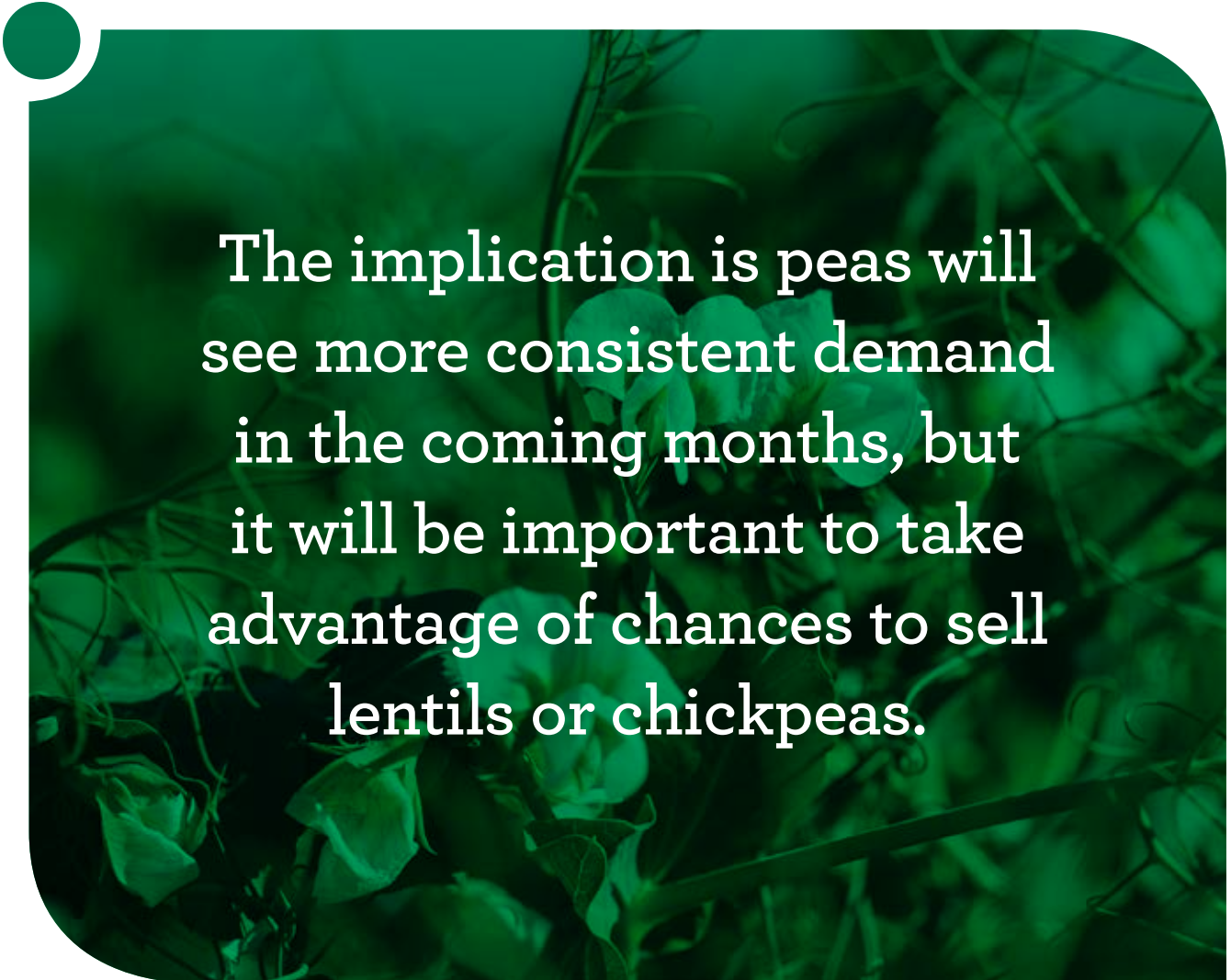
The fact that India's import duty on U.S. origin lentils and chickpeas is 10 per cent higher than for any other country could benefit Canada. It is harder for Canada to sell directly to India than it is for other countries. That just means that Canadian lentils could flow through Turkey or another country where they can be fumigated with methyl bromide. This is how Black Sea exporters get around the problem.

The implication is that if the demand is there, Canadian red lentils will meet it, even in countries where selling direct is difficult or impossible.

This year's red lentil crop is down a lot from last year, but there is a risk green lentil production is up more than people think. Even here, demand patterns are changing.

South American purchases of pulses are rising because of migration. Tens of thousands of people are fleeing Venezuela, and bringing their food habits with them. One pulse packager in Chile said he used to need one truck load a month. Now he needs five and expects that to increase. This benefits green lentils and dry edible beans. The growth is not expected to be big enough to prevent stocks from remaining high until at least the 2019/20 marketing year.

Canadian chickpea growers also face more uncertainty in the coming year. Global production of medium and small calibre Kabuli-type chickpeas is up over last year, but prices continue to be supported by tight stocks of large calibre chickpeas. That, in turn, could sustain production in India and Mexico, which would keep world inventories high relative to underlying demand, through at least the first half of 2019.



The implication is peas will see more consistent demand in the coming months, but it will be important to take advantage of chances to sell lentils or chickpeas.

A lot of the growth in chickpea production is tied to rising domestic consumption. However, there is no good data on how much hummus is manufactured and consumed each year and it is impossible to know if it is a fad or a long-term change in fundamental demand. Several years ago, black bean consumption jumped in the U.S. because of the popularity of Mexican food. That changed as people tried something else.

For growers, these differences between the sources of demand in peas, lentils, chickpeas, or faba beans are critical. Of the

four, peas will should see continued growth in demand in the food manufacturing sector because they are the least expensive source of protein, starch, and fibre isolates. The others are more dependent on specialized products and direct consumption in meals. In the feed sector, faba beans and peas are also preferred.

The implication is peas will see more consistent demand in the coming months, but it will be important to take advantage of chances to sell lentils or chickpeas. Grower selling does have an impact on

price. Avoiding chances to sell can result in short-term increases, but if the amount of lentils or chickpeas on hand drops too slowly, it could hurt prices after the fall shipping period. •

Brian Clancey is the Editor and Publisher of www.statpub.com market news website and President of STAT Publishing Ltd. He can be reached at editor@statpub.com



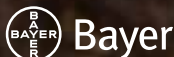
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Where Are Peas Going?

Market potential for Saskatchewan peas

BY MARLENE BOERSCH, MERCANTILE
CONSULTING VENTURE INC.

AS THE CANADIAN PEA CROP IS BEING HARVESTED we are reflecting on what has been an eventful year. First, there is the debacle with India's pulse market last fall. Second, given the market disruptions, we expect forward sales of peas for the late summer/early fall this year to be a lot smaller than in recent years.

Graph 1 gives a visual presentation of how Canada fared in pea export markets by destination in the 2017/18 crop year compared to 2016/17. As of the end of May (latest data available), pea exports were 1.2 million (M) tonnes lower in 2017/18 than in 2016/17 (also to the end of May). It is no surprise that by far the biggest reductions in exports occurred to India (down 1.5 M tonnes) and to Bangladesh (down 255,000 tonnes). On the upside, we shipped 495,000 tonnes more to China and 171,000 tonnes more to the United States (U.S.) than the year prior. These four countries represent the big swings in recent demand. But it is perhaps noteworthy that pea exports to all other major destinations except the Philippines were down as well.

It is important to understand the reasons behind the demand changes. For India, these are twofold. The first and key reason

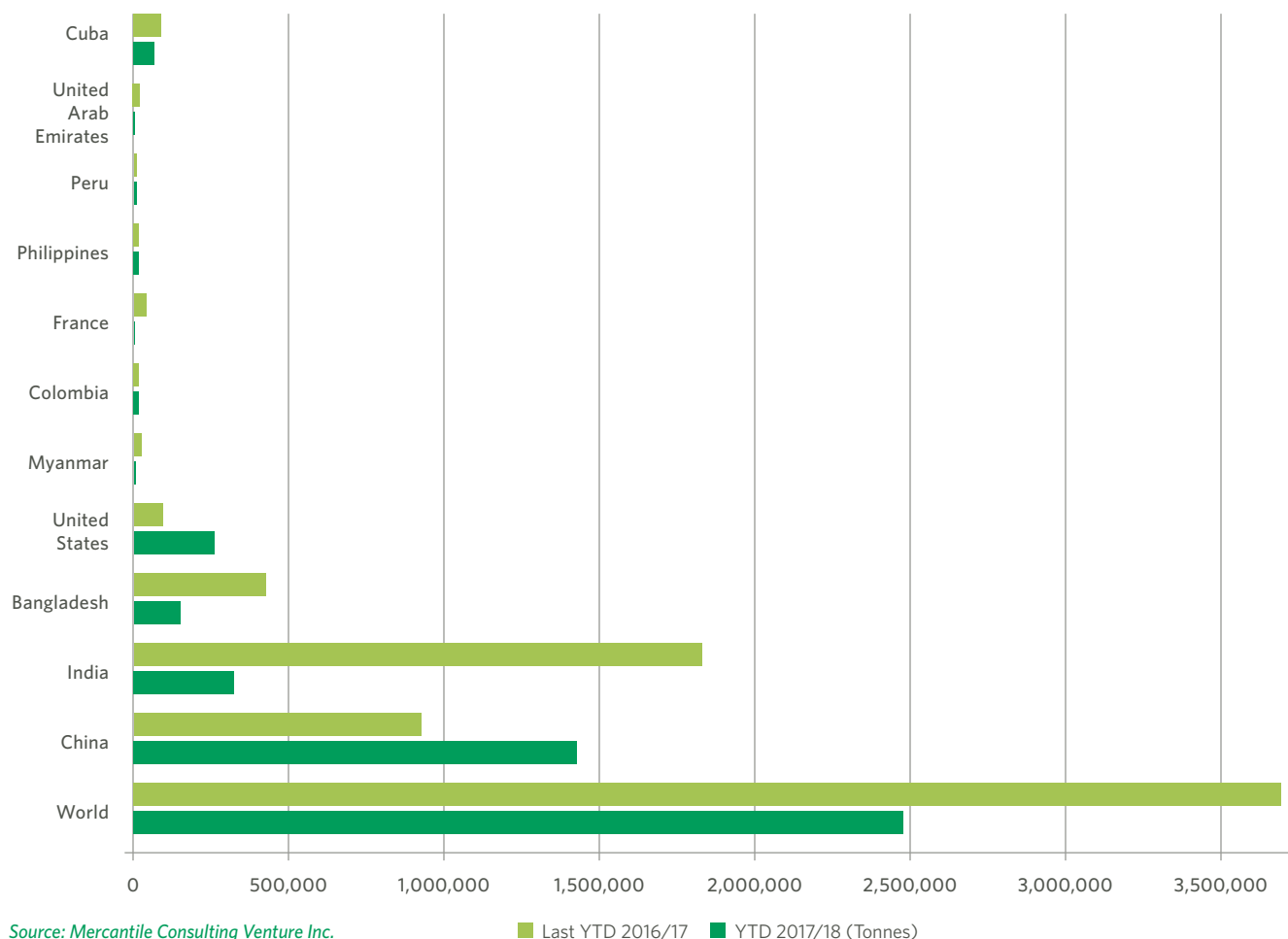
is political. Last fall, the Modi government in India decided to bow to lobbying and political pressure to help Indian importers/traders with massive stock holdings in a falling market. The tools used were protectionist measures (phytosanitary practices, tariffs, and quotas) to slow and then virtually halt the inflow of peas to India. This was to stabilize and then raise domestic prices for peas. If that was the full intent of the measures, then they worked (for India) because domestic Indian prices for peas are now some \$200 per tonne more expensive than available on the export market. The cost of the policies rests squarely on the shoulders of Indian consumers who now pay artificially inflated prices for peas. Unfortunately, the reason behind the financial burden on Indian consumers has not yet received a lot of attention or publicity in India. Farmers in India were told that the policies were also designed to raise overall pulse prices sufficiently to surpass the Minimum Support Price (MSP) set by the Indian Government. Peas are a small crop in India, but farm prices in India for the bigger red lentil and chickpea crops have remained below the MSP promised by the Indian Government. In fact, the Government is reported to have purchased 1.5 M tonnes of new crop domestic chickpeas (nearly 17

per cent of the Indian chickpea crop) below the MSP, so farmers are not altogether happy either. Still, with a general election likely in India this fall, the Modi government is not expected to make major adjustments and stick to their current policies.

The second reason for smaller Canadian pea exports is an important one for Canada. Given good returns to pulse crops over the past several years, new competitors have entered the market and are competing for increased market share. Most important is the expanded competition by Black Sea suppliers, who have managed to displace some of our traditional demand for peas into India and other destinations. We note that Black Sea production increases are developing alongside much improved transportation and port handling capacity. Former Soviet Union wheat exports alone will reach 67.3 M tonnes in 2017/18, up 24 per cent (12.9 M tonnes) from just the previous crop year. In comparison, total Canadian wheat exports, excluding durum, will amount to nearly 16.5 M tonnes.

In Canada, we seem content to put up with virtually the same inland rail capacity every year, with very little attempt to allow for increases in exports to at least keep

Graph 1: Year To Date Pea Exports compared to Previous Year



up the market shares achieved earlier. Bill C-49 will do nothing to fix this capacity problem. As long as we compete with other grains and other commodities for a given rail transportation capacity, we will not be able to meaningfully respond to spikes in demand. In addition, the tendency is to keep adding to overall inland costs without considering the effect on overall long-term Canadian competitiveness. Especially in years of falling prices, this Canadian attitude will make it harder and harder to compete internationally. Overall, given increased protectionism and increased international competition, there is little reason to expect major changes to the Indian pea market this fall.

China is one of the two countries where pea exports have increased meaningfully. In fact, China was Canada's single biggest buyer of peas for the 2017/18 crop year, and we expected exports to have reached 1.6 M tonnes by the end July 2018. The conventional market for peas in China is primarily for starch (replacing mung bean) and snack food. This year, Canadian peas also have made inroads into the feed market as pea protein is priced favourably relative to soybean protein. Unfortunately, the strong buying posture shown by China in April and May slowed in June due to uncertainty about the outcome of ongoing U.S./China trade debates, so Canadian traders are worried about the lack of additional forward

buying. We think the actions by the U.S. in mid-June (announcing another 10 per cent tariff on Chinese imports if Beijing proceeds to impose import tariffs on U.S. imports) will help to put Chinese pea purchases back onto the agenda. The much lower Canadian dollar and significantly increasing wheat and feed grain values will definitely help with new sales. Aside from the trade dispute, peas are still well priced to compete in to the feed market with other feed grains and with soybean protein values. In fact, we think they are currently priced too cheaply in Canada relative to wheat and barley. We expect that crop-year Canadian pea shipments to China for both starch and feed use will again increase, especially if the

Pulse Ingredients in New Pet Food Products by Subcategory in Canada and the U.S. Between January 2006 and December 2016

Subcategory	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total New Product
Dog Food Dry	14	13	23	24	30	31	55	60	114	113	88	565
Dog Food Wet	8	7	14	14	21	16	30	68	142	70	45	435
Dog Snacks and Treats	5	6	7	15	11	15	22	38	86	47	41	293
Cat Food Dry	7	3	15	8	7	13	18	23	37	26	12	169

Source: Agriculture and Agri-Food Canada, Global Analysis Report, July 2017

escalating tariff threats on U.S. soybeans get implemented by China. We are currently using 1.8 M tonnes for pea exports to China for 2018/19, but the country clearly has the potential to substitute lost imports by the Indian subcontinent.

The U.S. market also has grown over 160,000 tonnes over last year and is using Canadian peas both for splitting (replacing U.S. peas used in the lucrative Food for Peace food aid program) and in the pet food markets. It is hard to split U.S. exports by usage, but the pet food usage especially stands to increase again next year. We believe domestic U.S. pea supply could fall by approximately 10 per cent to 900,000 tonnes due to lower 2017/18 ending stocks, which (barring trade barriers) should allow Canadian peas to feed into the splitting market and also into the growing pulse pet food markets. Mercantile is using the benchmark of 350,000 tonnes for Canadian pea exports to the U.S. for 2018/19.

A third destination where Canada has increasing pea sales is to our domestic market. Canada actually does not have good public data on the domestic use of peas. Statistics Canada uses the category more like a slush fund to balance their balance sheets rather than match pea disappearance with actual seed, feed, and fractioning usage. However, especially for the growing latter category, we can consider the capacity outlook for fractioning. According to our compilation of data for Verdient Foods Inc., Roquette, Canadian Protein Innovation, W.A.

Total Pea Fractioning Capacity in Canada	
As of 2017	160,000 mt
As of 2018	260,000 mt
As of 2019	610,000 mt
As of 2020	746,000 mt

Source: Mercantile Consulting Venture Inc.

Grain & Pulse Solutions, and Prairie Green Renewable Energy, we expect the following pea processing capacity to come on stream, which should attract peas accordingly for fractionation.

We currently project total pea usage to amount to roughly 3.9 M tonnes, with 2.9 M tonnes going to exports, 275,000 tonnes seed, approximately 500,000 tonnes to feed, and 260,000 tonnes to fractionation. This compares to 3.57 M tonnes for 2017/18. However, depending on the international trade environment this fall/winter, exports to China could well exceed current forecasts. •

Marlene Boersch is an operating partner in Mercantile Consulting Venture Inc. More information can be found at www.mercantileventure.com



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ELECTION



In the event an election is required for Saskatchewan Pulse Growers Board of Directors, election packages will be mailed out mid-October and

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Where are the Chickpea and Faba Bean Markets?

Knowing where
to find opportunities
for your crops

BY CHUCK PENNER, LEFTFIELD
COMMODITY RESEARCH

ONE OF THE DANGERS IN GRAIN

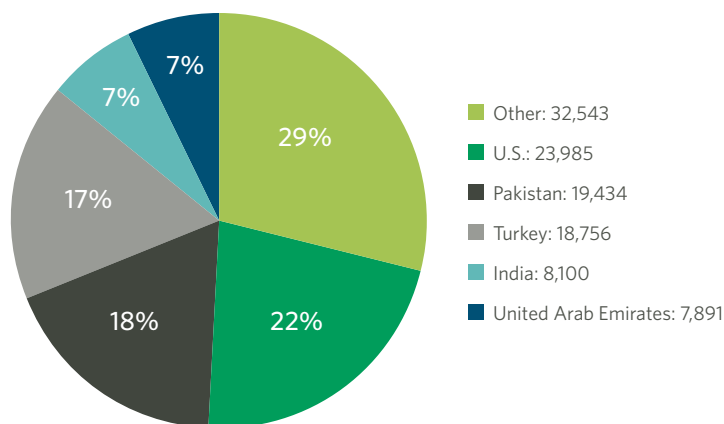
MARKETING is assuming things stay the same and that usage and export channels will just carry on as they have before. Pulse markets have taught us a couple of lessons in the past year or two. The first is that we cannot rely on long-established markets being there for us. The second lesson is more positive — new uses and opportunities will show up, although they sometimes require a lot of effort.

Chickpeas

As chickpeas are a pulse crop, it is easy to assume that India is the main driver of the market. In reality, India is only one piece of the puzzle, especially when it comes to Kabuli chickpeas, and India is only a minor buyer of Canadian chickpeas. For Desi chickpeas, it is a different story, as India dominates global demand, but Desis only make up five to 10 per cent of Canadian chickpea acreage.

The pie chart shows which countries are the largest buyers of Canadian chickpeas in 2017/18. Our most important market

2017/18 Year to Date Chickpea Exports

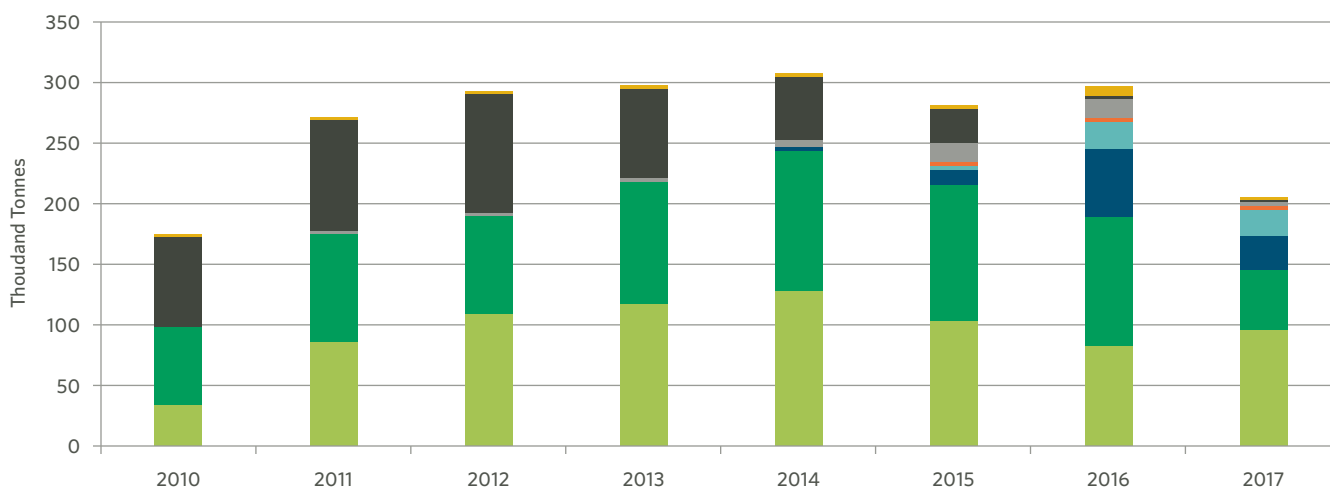


Source: LeftField Commodity Research

for chickpeas is very close to home. The United States (U.S.) was the largest buyer in 2017/18, but that has been going on since 2011/12. In this past year, the U.S. total was only slightly ahead of Pakistan and Turkey, but in 2016/17 the U.S. took nearly 40 per cent of Canadian chickpea exports.

While the U.S. has been a large buyer of Canadian chickpeas, it is also expanding its own production at a good clip. Over the past three years, the U.S. crop has nearly tripled to 313,000 tonnes in 2017, and another 25 per cent increase is expected for 2018.

Faba Bean Imports – Egypt



Source: LeftField Commodity Research

■ Australia ■ United Kingdom ■ Lithuania ■ Latvia ■ Estonia ■ Canada ■ France ■ Other

Between the growing imports and its larger crops, the U.S. market has been chewing through far more chickpeas than in the past. They have been exporting larger volumes but domestic use has also been growing fairly rapidly. Over the past decade, estimates show U.S. domestic consumption has expanded tenfold and is not showing signs of slowing down.

The automatic assumption is that the growth in domestic consumption has come from people eating more Middle Eastern foods such as hummus, but the story is more complex. Increasingly, chickpeas in the U.S. are being broken down into components — protein and starch — and used in a whole range of products. This can be included in many different foods such as pasta and snacks, but have also ended up in pet food.

This type of usage is very positive for the chickpea market as the growth is more sustainable, and fits with the goal of being value-added. That does not mean it is all smooth sailing. The market will still have ups and downs just like any other, but adding more non-commodity uses to a crop is always positive.

Faba Beans

Faba beans have been traded globally for many years, and even though they have been grown on the Canadian prairies for a

couple of decades, it still seems to be early days for the Western Canadian market. Canadian acreage really started to jump in 2014 and 2015 but that early momentum has been lost as the demand side of the market has been slower to develop.

The dominant export opportunity has been Egypt, but that market is competitive and crowded. Traditionally, that market was evenly divided between Australia, the United Kingdom, and France, but new entrants such as the Baltic countries have emerged, as shown in the bar chart. In 2017, Egyptian imports dropped sharply but the first quarter of 2018 (not shown) seems to indicate volumes are rebounding back to more typical annual levels, close to 300,000 tonnes.

Canada has also become a supplier to the Egyptian market but volumes have remained modest. The conventional wisdom had been that Egyptian buyers are looking for large-seeded tannin varieties. Within the past year, that assumption has come into question with requests from Egypt for Canadian white faba beans. Australian faba bean exports into Egypt are also white varieties. This export market needs to be pursued but, as we know, relying on a single destination is risky.

Canadian export volumes have been relatively small (around 15,000 tonnes in 2017/18) but are increasing. Even so, it

leaves most Canadian faba beans destined for the livestock feed channel and that market has not reached its full potential either. With higher protein than other pulses, faba beans are well-suited for livestock feed, but it seems to be in the classic catch-22 situation where farmers need more interest from livestock feeders, and the feeders are waiting for farmers to grow more faba beans.

The high protein content also makes faba beans a good candidate for food use, similar to other pulses that are being fractionated and incorporated into mainstream food products. Once again, this is a situation that requires production and processing to expand in tandem. Based on discussions with farmers in various parts of the prairies, it seems there is considerable pent-up interest in growing faba beans, if only demand could solidify. That means processors either in Canada or the U.S. need to step up to the plate.

Of course, these are only some of the trends that are currently underway. And based on experiences with other pulse crops, the next five or ten years are almost guaranteed to look a lot different. •

Chuck Penner operates LeftField Commodity Research out of Winnipeg, MB. He can be reached at info@leftfieldcr.com

Could Saskatchewan Be a Soybean King?

Market opportunities for Saskatchewan soybeans

BY BRENNAN TURNER, FARMLEAD

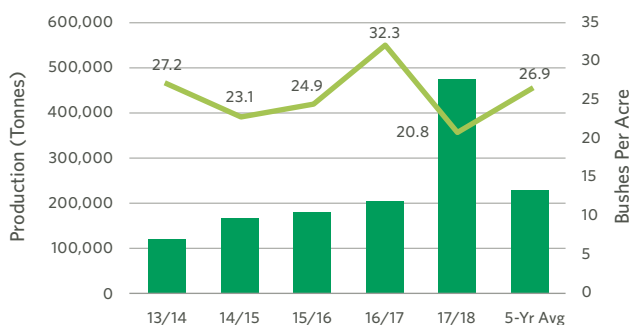
WHEN ONE THINKS OF SOYBEAN PRODUCTION IN CANADA, historically, all attention has been put on Ontario and Quebec. Then about a decade ago, we started seeing a significant uptick in soybeans getting planted in Manitoba. Now, the area of dirt in Saskatchewan getting seeded with soybeans is becoming the headline.

Canada's five-year average for soybean seeded acres is 6.05 million (M) acres. Specific to Saskatchewan, the five-year average is 360,000 acres (or about six per cent of all acres). For this year, in 2018/19, it is estimated that Canadian acreage will fall 13 per cent year-over-year to 6.32 M acres. In Saskatchewan, the reduction is much

more pronounced, down 41 per cent from last year's record of 850,000 acres to just 407,500 this year. This is mostly attributed to last year's poor yields and farmers opting out for different oilseeds for their rotation.

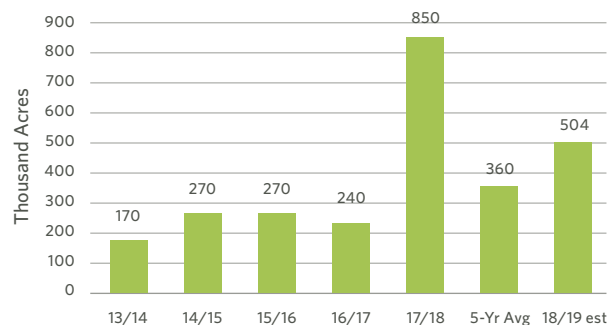
However, last year was not likely to be an asterisk in the years to come. Back in 2012,

Saskatchewan Soybean Production & Yields



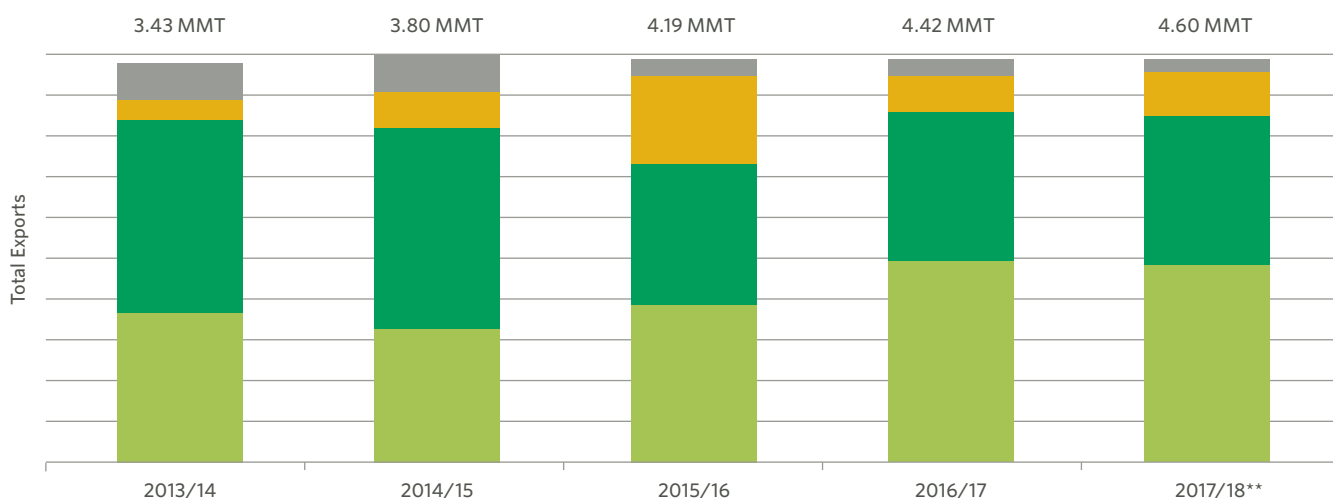
Source: Statistics Canada

Saskatchewan Soybean Acres



Source: Statistics Canada

Canada Soybean Export Destinations (by Percentage)



Source: Canadian Grain Commission, Agriculture and Agri-Food Canada

*Other includes: United States, Nigeria, Egypt, Cuba, and Russia

**Based on AAFC latest estimate

■ China ■ European Union ■ Asia (excluding China) ■ Other*

Percentages may not add to 100 per cent due to rounding

there were just four soybean varieties that were able to be grown in less than 115 days (also known as short-season varieties). Today, there are 80. There are also some very early varieties now out on the market. Thus, those growers farming in areas with less heat units (ex. Saskatchewan) are suddenly finding themselves with an additional option for their crop rotation.

So, if more soybeans are getting grown in Saskatchewan, where are they going to all go?

On the domestic front, Agriculture and Agri-Food Canada (AAFC) is forecasting that 1.9 M tonnes will go into the food and industrial (otherwise known as crush) sector in 2018/19, slightly higher year-over-year. However, what is more noticeable is the drop in the feed sector. AAFC is expecting just 310,000 tonnes of soybeans in the feed/waste/dockage column, down 65 per cent year-over-year after last year's record use. This is mainly attributed to the smaller crop though this year. However, we continue to see growing interest from livestock producers on the FarmLead Marketplace to buy more product directly from growers and roll the product themselves into feed.

In June AAFC was forecasting 2018/19 Canadian soybean exports at a record 5.3 M tonnes. This would be up 15 per cent,

or 1.3 M tonnes, from last year's record of 4.6 M tonnes. It has been suggested that China will buy and ship in 2.13 M tonnes of Canadian soybeans. That is up 15 per cent year-over-year.

Up until recently, though, Europe was the major purchasing agent of Canadian soybeans, accounting for about half of all soybeans shipped out of the Great White North. Despite them losing the title of main buyer of Canadian soybeans to China three years ago, they still imported more than 1.7 M tonnes in 2017/18, up 21 per cent year-over-year. Impressive export growth rates have also been seen around Asia, with exports to the region (excluding China) up 84 per cent last year.

If we break this all down, demand for high-protein feedstuffs continues to support the expansion of soybean production not only in Saskatchewan, or Canada, but around the world. And nowhere is this demand more omnipresent than China. The country is seeing a middle class that is growing by about a million people per month. When there is more middle class, the demand for the meat increases and the driver for protein is feedstuffs.

More specifically, China's imports of soybeans have increased by nearly 60 M

tonnes over the past decade, basically tripling. The elephant in the room though that it is potentially holding easy wins growth opportunities back, is the ongoing trade war. With China now charging a 25 per cent import tariff on United States (U.S.) soybeans, a game of musical chairs has begun. This means that more U.S. soybeans will be heading into markets like the European Union and other Asian markets that Canadian soybeans have come to enjoy. Conversely, more Canadian soybeans could be headed to China.

The main takeaway here is that we at FarmLead continue to be bullish on oilseeds, and thus, soybeans. The trend of increasing demand for protein is not going to reverse any time soon. Thus, there will be continued growth opportunities, not only in China, but also emerging markets in China, and later down the road, even Africa. Putting soybeans into your rotation is something for which there is a lot of literature out there, but you can be assured there will likely be a feed, crush, or export marketing opportunity waiting for your harvest.●

Brennan Turner is the President & CEO of FarmLead.com

SPG'S ANNUAL GENERAL MEETING

**January 14, 2019
at 5:00 pm**

**TCU Place, 35 22 St. E,
Saskatoon, SK**

You do not need to be registered for CropSphere to attend the AGM.

AGENDA

1. Adoption of Agenda
2. Introduction of the Board & Staff
3. Declaration of Election Results
4. Approval of Minutes from Last Annual General Meeting (January 8, 2018)
5. Business Arising from the Minutes
6. Response to 2018 Resolutions
7. Presentation of the Audited Financial Statements
8. Appointment of Auditor for 2018/19
9. Report from the Organization
 - Chair's Report
 - Executive Director's Report
10. Resolutions

For more information on the AGM, contact: pulse@saskpulse.com or 306-668-5556.



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Transportation Legislation Drives Impact for Farmers

Bill C-49 is a solution to allow
Canadian grain farmers to get
products to market

BY MEGAN MADDEN

OVER ONE THIRD OF THE GLOBAL PULSE TRADE can be attributed to Canada's peas and lentils. For trade of this scale to succeed, the pulse industry relies on an efficient transportation system to get pulses to their destinations — whether domestic or international. On average, half of the grain produced in Canada is exported beyond our borders, and the percentage of pulses exported is even higher at 80 per cent. These Canadian pulse products are moved to over 150 markets around the world, and consistent, reliable rail transport is a key to those products arriving in a timely manner.

The Transportation Modernization Act (Bill C-49) is intended as a long-term solution to give Canadian grain farmers a strong, reliable, and efficient transportation system so they can get their products to market safely and in a timely manner. This bill received Royal Assent on May 23, 2018 — Royal Assent is the final stage of the legislative process, the formal process

by which a bill passed by both Houses of Parliament becomes law. It is only once Royal Assent has been given to a bill that it becomes an Act of Parliament and part of the law of Canada.

This Act was developed from consultations with stakeholders including representatives of the agricultural sector such as Pulse Canada, where Saskatchewan Pulse Growers (SPG) farmer directors sit on the board. Pulse Canada worked with a wide variety of agriculture industry stakeholders including shippers, processors, and producers to develop their submission to the Canada Transportation Act Review, which included suggestions such as establishing reciprocal penalties between railway companies and their customers, and clarifying the definition of "adequate and suitable" service.

"Accountability was a significant component that the pulse sector was asking for,"

says Greg Northey, Director, Industry Relations with Pulse Canada. "The railways themselves need to be held accountable when there is no service provided, and previously, there were no consequences."

This bill has strengthened the reciprocal penalties for railways, he explained. Currently, shippers face penalties when service is not provided, but C-49 ensures railways can now be held to the same standard and face financial penalties. In setting the criteria for penalties, the government has recognized the need for them to be sufficient to encourage the efficient movement of the shipper's traffic, and encourage performance of the railway system while remaining balanced between the shipper and the railway company.

"We hope the outcome is that railways structure capacity to avoid penalties and provide good service consistently," says Northey.



Rail cars being loaded with grain at a local elevator.

The Government's bill will also:

- Permit the Canadian Transportation Agency (CTA) to initiate investigations into issues facing the supply chain with the approval of the Minister of Transport
- Add soybeans as an eligible crop under the Maximum Revenue Entitlement
- Allow shippers to use the new long-haul interswitching remedy, even if they are served by more than one railway or are within 30 kilometres of an interchange, if the railway or interchange is not in the reasonable direction of their movement

The introduction and management of metrics and measurement were a significant contributor to these positive changes, adds Carl Potts, Executive Director of SPG. "Pulse Canada worked with the Ag Transport Coalition to ensure that performance metrics were in place and that the data could be used to identify bottlenecks in the

system. At a particularly low point, we were able to determine that only 30 per cent of cars were being delivered versus what was in demand."

These metrics will also be valuable to the CTA as Bill C-49 gives them increased ability to act on their 'own motion power' to investigate complaints and service levels without having to wait for shippers to launch expensive and risky level of service complaints in order for the Agency to investigate and act.

Combining previous pieces of the Act, this bill also allows for long-haul interswitching (LHI). Currently, most shippers are captive to a single large railway such as Canadian Pacific or Canadian National, but now LHI allows shippers to introduce competitive forces in their rail service by requiring their local carrier to transport traffic to the nearest interchange, where

a competing carrier can then move it to the final destination. "The outcome of this pro-competitive measure will depend on whether shippers can access it through a quick and efficient application process," says Northey.

"There is no one silver bullet to the transport issue," says Potts. "These changes have the potential to work together as a package to improve the consistency and quality of service not only for shippers, but directly for farmers, as grain shipping backlogs result in major costs at the farmgate. The ultimate measure of success will be improvements in the level of service and system performance we see." •

Megan Madden is the owner of southpaw PR inc., a strategic communications consultancy. She can be reached at @southpawMegan or megan@southpawpr.com

Market Opportunities for Pulses as Food Ingredients

Where internationally
are pulses poised
for growth?

BY DELANEY SEIFERLING

WHEN THE CANADIAN PULSE INDUSTRY ANNOUNCED A GOAL TO HAVE NEW USES FOR 25 PER CENT OF CANADIAN PULSES BY 2025, Pulse Canada and Saskatchewan Pulse Growers, along with other provincial pulse associations across Canada got to work developing and refining strategic plans designed to help meet this ambitious goal, says Julianne Curran, Pulse Canada's Vice President of Food and Health.

"There has been a lot of thought put into how we can achieve this target," she says.

Much of the industry's prior work in the area was focused on marketing pulses more generally to all target audiences. The

next phase of work will consider end-use applications that each pulse crop is best suited to, and the markets where the Canadian industry has advantages and volume opportunities, Curran says.

"We understand that two million tonnes is an ambitious target that will require multiple sectors and regions, but also unique strategies designed for each pulse type to be more effective."

The strategy will focus on specific market opportunities and applications for each pulse type and will also identify specific companies or groups of companies the industry is looking to engage with, says

Jackie Tenuta, Pulse Canada's Director of Market Development.

"Every sector is a little bit different. In some areas, there are one or two companies that really dominate the marketplace but others are much more diverse."

For example, the global snack food market is dominated by just one company, PepsiCo, while the global pet food market is dominated by Nestlé and Mars.

However, the baked goods industry is much more diverse, with a great deal of the production being non-branded, artisanal bread, Tenuta says.



Pea and other pulse flours are finding new uses in foods and food applications around the world.

"Each sector is very different so our strategy needs to be different for the sectors we are targeting."

The Canadian pulse industry recently commissioned a report looking at the current uses of pulses in China to determine where there is room for growth and marketing opportunities, says Tanya Der, Pulse Canada's Manager of Food Innovation and Marketing

The report estimated that consumption of pulses in China's food and beverage sector was three million tonnes in 2016, about 800,000 tonnes of which was used in the vermicelli noodle sector.

"The applications for pulses in China are similar to North America actually, but more diversified," says Der.

The main uses for Canadian pulses after noodles were baked goods, snacks, sprouts, and sauces. And while the noodle sector uses primarily pea starch as an ingredient, it was primarily pulse paste made from beans, often blended, which was used to produce snack foods, baked goods, and drinks.

There is currently about 200,000 tonnes of pulse flours being used in China's food industry, Der says. Processing is fragmented however, which means there is opportunity to improve existing flour technologies to cater to the performance and supply requirements of different end users.

Pulse Canada has already done some work in this area. From 2013 to 2015, scientists in China worked with commercial companies to test the inclusion of pea flour in plain noodles, steamed buns, and biscuits. As a result of this work, one Hunan-based company successfully launched a noodle using a 20 per cent pea flour.

If only a few more large-scale noodle manufacturers reformulated 25 per cent of their product lines with 20 per cent pea flour, this could have a significant impact on demand for Canadian peas, Der says.

The Canadian industry will also look at how to best market pulses in China, as consumer perceptions of different pulse types are important. For example, some pulses such as kidney beans are perceived as ordinary, while others such as mung,

adzuki, and black beans enjoy a higher level of awareness and perceived health benefits.

The industry is pursuing consumer research to better understand where peas fit within the pulse umbrella, and whether there are opportunities for food manufacturers to position Canadian peas positively versus other ingredients.

This is important as Chinese consumers are increasingly looking for safe, high quality foods and ingredients, Der says.

"Food companies need a reason and a compelling story to include pulses such as peas into their product formulations. Results from consumer insights on pulse perceptions will be used to help companies better market pulse-based foods that will lead to greatest consumer uptake."

In short, there are a lot of opportunities for Canadian pulses in China, Der says. Now it is just a matter of exploring the exact ingredients and processing innovations needed to expand demand. ■

Delaney Seiferling is a freelance ag writer. She can be reached at delaney@dseiferling.com

Market Opportunities for Pulses in Animal Feed

Pet food, aquaculture, and animal feed shows room for growth

BY DELANEY SEIFERLING

THE CANADIAN PULSE INDUSTRY HAS LONG BEEN FOCUSED ON THE DEVELOPMENT of new markets for pulses and pulse ingredients, but that focus was even further amplified with the announcement of a goal to have new markets or uses for 25 per cent of Canadian pulses by 2025.

For example, the industry identified an area that holds great potential to help meet the “25 by 25” target is the feed industry, which includes livestock, aquaculture, and pet food.

Before beginning any promotional work in this area, the Canadian industry wanted to get an idea of how the feed industry works, domestically and internationally, and if and where pulses are already being used.

What they learned was that there is huge room for growth, especially in the area of aquaculture in Asia, where seafood is a major part of the culture, says Tanya Der, Pulse Canada’s Manager of Food Innovation and Marketing.

Some recent research shows that currently the aquaculture industry in Asia uses minor amounts of pulses, mostly peas, in some aquaculture feeds in China, but that there is potential for growth.

Previously decisions around ingredients for aquaculture feed have been specific to pricing, but there have been some indications this is changing. Consistent volumes are also required as feed manufacturers are hesitant to switch

between ingredients due to limited supplies, Der says.

“We are hearing that sustainable volumes are needed by these suppliers, because the industry is so massive and the volumes are so large,” she says. “There is a lot of pressure right now with production issues and the feed that is not sustainable. So aside from cost, consistent supply is important.”

Another potential angle for Canadian pulses is that they are a higher quality ingredient than the currently used soy, fishmeal, corn, and grains by-products. Previous research has shown that peas are a functional and nutritionally sound ingredient for aquaculture feed, with the potential to replace alternative protein and energy



Animal feed pellets made with pulse ingredients are becoming increasingly popular in the aquaculture, and pet food markets.

sources, while maintaining growth and performance.

Previous research has also shown that peas can be used as nutritionally functional binder for aquaculture feed pellets and can increase pellet stability, which is important as aquaculture pellets need to remain stable while submerged in water.

Finally, the potential for peas to lower feed costs in aquaculture is also attractive, Der says. Aquaculture feeds are inherently more expensive than traditional livestock feeds, such as those in the swine and poultry markets.

Going forward, Pulse Canada, who has taken a leadership role in this area on behalf of the Canadian industry, plans to better understand the potential for pulses in aquaculture and livestock feed in China and Asia by engaging with large livestock and feed companies. The goal is to better understand how pulses are currently being used as feed, and what potential strategies can be developed to increase this usage.

In the pet food industry, the Canadian industry has already been experiencing growth in the use of pulse ingredients, and believes there is even more potential.

In this area, the health benefits of pulses for pets have already been proven.

Dr. Lynn Weber, a researcher and professor with the University of Saskatchewan, has done extensive research on the topic. She has proven through her research that including pulse starches in both cat and dog food had a positive effect on the health of the animals, through improved weight control and lowered rates of diabetes.

Several manufacturers are already selling pet food that includes pulses, mostly peas, and marketing it as a healthier option, Der says. However, the amount of pulses used as pet food ingredients in North America is still quite low.

Research undertaken by the Canadian and United States (U.S.) pulse industries showed that inclusion rates for pulses in pet food are between 1.5 to 3.5 per cent in Canada and the U.S., says Jackie Tenuta, Pulse Canada's Director of Market Development.

"We knew there was definitely a market there, but we really had no idea what was going into pet food from a pulse ingredient perspective. So now we are using this

information as one of the inputs for developing a strategy for pet food," she says.

The Canadian industry is currently doing stakeholder consultations to determine what marketing activities and research is needed to drive an increased use of peas in pet food. One question that needs to be answered is if there is a need for more research to substantiate the nutrition, health, and sustainability benefits for pea ingredients in pet food.

"We have a lot of data on pulses in the pet food market here," says Julianne Curran, Pulse Canada's Vice President of Food and Health. "Now we want to actually validate the opportunities and use insights from a broad group of stakeholders on the marketing and research strategy before we proceed."

The feed strategy that has been developed collectively amongst the Canadian pulse industry will also target pet food manufacturers in Europe, aquaculture industries across East Asia, and China's feed manufacturers. ■

Delaney Seiferling is a freelance ag writer. She can be reached at delaney@dseiferling.com

Market Opportunities for Pulses in Foodservice

Large volume foodservice can help increase demand for lentils in the U.S.

BUILDING ON THE CANADIAN PULSE INDUSTRY'S GOAL to have new markets or uses for 25 per cent of Canadian pulses by 2025, Canadian pulse promoters are looking at ways to revise market development plans to hone in on achieving the desired end results.

One of the areas of that will see an expanded focus is the foodservice sector, where the industry has been working in for the past couple of years to promote the use of Canadian lentils amongst United States (U.S.) colleges and universities.

The knowledge the industry has gained so far will be crucial to informing the next phase of promotions, which will include a narrower focus, says Amber Johnson, SPG's Manager of Market Promotion.

The emphasis in this area will be placed on the U.S. marketplace and will be targeting non-commercial foodservice companies

such as Compass Group, Sodexo, and Aramark, which run food operations for large-scale organizations such as hospitals, corporations, and big businesses, in addition to a focus on colleges and universities.

Not only do these companies have significant influence over menu items, they also have important buying potential because they do centralized buying and supply management, while also running physical operations, Johnson says.

Part of the goal will also be helping these companies connect with Canadian suppliers that can provide consistent and high quality product for their foodservice needs.

"Over the last few years we have built great relationships with some of those operators, which really allowed us to learn about how their businesses operates and where the potential is before we dove in with a full-on strategy," she says.

For example, three years ago SPG partnered with the Culinary Institute of America (CIA), an American college that is largely regarded as one of the premier chef schools in the world.

With 49,000 alumni, including some of America's most famous chefs, the CIA has major influence on the American diet — which made this partnership a valuable tool for helping promote Canadian lentils, Johnson says.

"Through this partnership we really got a better understand of where the volume is being moved in foodservice in the U.S. and what is driving that movement," she says. "This has evolved into us identifying which pieces of the foodservice industry to focus on in our targeted strategy."

Leveraging the relationship with the CIA, as well as other relationships built in the last several years, the Canadian industry was also able to do targeted stakeholder



Chefs from the Culinary Institute of America find new and unique ways to incorporate Canadian lentils into daily dishes in U.S. hospitals, college campuses, and more.

consultations earlier this year to determine where these operators are currently using pulses on their menus and where there is opportunity to grow use.

The new strategic direction for work in the foodservice area includes a drive to position lentils as the primary source for plant protein. With growing consumer interest in plant protein and consumers that are looking to slightly reducing their consumption of animal products, lentils are well positioned to gain a larger share of the North American plate.

"A recent study by DataEssentials in the U.S. found that 44 per cent of consumers are trying to eat less meat tomorrow than they are today, while 57 per cent are trying to eat more plant protein," says Rachel Kehrig, SPG's Director of Communications and Market Promotion.

"This means foodservice operators are looking for efficient and cost-effective ways to meet the demand of this shifting

consumer demographic. We are working directly with foodservice operators in a hands-on setting to demonstrate how lentils can play an integral role in meeting the needs of their customers in a healthy and sustainable way."

When talking about sustainability, Kehrig notes that lentils are already receiving attention from foodservice operators.

"These larger foodservice operations are looking for food solutions that can help contribute to broader corporate sustainability goals, while still appealing to their customer base. Lentil's nitrogen-fixing properties and low carbon footprint, coupled with the high levels of plant protein, means they have the potential to meet both corporate and customer demands."

When promoting to foodservice operators there are two targeted food applications that the Canadian industry is going to focus its marketing efforts on, in order to make significant gains in market share.

First, the concept of food blends – combining animal and plant protein to create a food product that serves the needs of the customer base that is interested in reducing their overall meat consumption, but still seeks to enjoy meat as part of a healthy lifestyle.

Second, the idea of healthy bowls, which combine the plant protein of lentils with whole grains and vegetables, and a small optional portion of meat. Bowls are an emerging trend amongst millennial and Generation Z consumers, who are the ones that drive trends amongst foodservice operators.

"We are going to focus on those two things in terms of applications, instead of trying to put lentils into everything," Johnson says.

"The more we can focus in on certain concepts that are menuable on a real large scale basis, the more we have the potential to move the needle and create new demand." ■

Pulse Legacy Award

Bill Copeland, a pioneer in
lentil production and pulse
processing in Saskatchewan

BY SASKATCHEWAN
PULSE GROWERS STAFF

WHEN IT COMES TO THE HISTORY OF LENTIL DEVELOPMENT IN THE PROVINCE OF SASKATCHEWAN, there is one name that pops up in conversations often — Bill Copeland. From farmer, to seed grower, to pulse processor, Bill Copeland has had a hand in the growth of the pulse industry in Saskatchewan from the beginning. It was for these reasons that Bill was recently recognized with the Pulse Legacy Award by Saskatchewan Pulse Growers, during the Pulse and Special Crops Convention in Regina.

Copeland was born and raised in Rosetown, Saskatchewan and went on to earn a Bachelor of Science in Agriculture degree from the University of Saskatchewan (U of S) in 1960. He married his wife Alma Kingwell and returned home to the Rosetown area to farm full-time.

He maintained contact with the U of S, in particular with Crop Development Centre plant breeder Dr. Al Slinkard, who is best known for developing the Laird and Eston varieties of lentils. That university connection influenced Copeland, as he began experimenting with crop rotations which included growing large green lentils.

Bill Copeland remembers why they decided to grow lentils. “During the time we started growing lentils the Canadian Wheat Board was barely selling grain. We could not live on that money, so we looked for an alternative.” Bill and Alma knew that lentils grew well on the land which they had, could handle dry weather, did not need a lot of fertilizer to grow, and that lentils had markets they could be sold into if money was needed.

“Dad was an entrepreneur and always thinking outside the box — he gave me lots to learn,” says son Bob Copeland, who farms with his father at Copeland Farms and Copeland Seeds. “There were not many people growing lentils at that time, just a lot of wheat and barley. My dad saw lentils as an added element to marketing the farm.”

Bob notes that at the time, it seemed like a lot of his dad’s ideas were adding extra work to the farm but looking back, what his father did was about being better as a farmer, and as an individual — constantly pushing himself to do something a little bit different to be better.

“Early pioneers in the pulse crop industry, such as Bill Copeland, really laid the

foundation for the whole industry to develop and flourish as it has,” says SPG Chair, Corey Loessin. “Not only on the production side, but also on the processing and marketing sides — Copelands have been leaders and innovators for the pulse industry. It is what has really allowed so many other growers to benefit from growing pulse crops in their rotations.”

Bill continued to support crop research in Saskatchewan, and has provided his land free of charge to the U of S to seed test plots and conduct research into new crops. He established the Copeland Prize in Crop Science at the College of Agriculture at the U of S, to help students in the crop science option. For all of his contributions to research, he had a malting barley, CDC Copeland, named after him. While Bill spent time convincing growers to adopt lentils as part of their rotations, Alma worked on recipes incorporating lentils, to try and get people to eat this new healthy food growing in their fields.

Over the years Bill Copeland has added pedigreed seed grower and pulse processor to his list of farming duties, which gave rise to Copeland Seeds. Being one of the first growers in Saskatchewan to process lentils

“When I first started working with pulses, I never could imagine how this would grow over the years,” says Bill Copeland.

and other special crops in preparation for export to other countries, was the beginning of what is now a booming industry in the province.

“When I first started working with pulses, I never could imagine how this would grow over the years,” says Bill Copeland. “To see how much the industry has expanded, and how the size of acres has grown, is tremendous. When we started growing lentils we knew nothing about the industry.” Bill commended the tremendous amount of research on pulses that have made the growth possible.

These days Bill and Alma, along with son Bob and Pam Copeland, continue to operate the family business together, and they have expanded their crop rotation to include durum wheat, barley, canola, lentils, and soybeans. Outside of the farm Bill has served as councilor in the Rural Municipality of Monet, has participated on local health and recreation boards in the Elrose area, has been inducted into the Saskatchewan Agriculture Hall of Fame, and participated as a farmer representative on the Senior Grain Transportation Committee for many years.

“It feels good to have my dad recognized for his efforts,” says Bob. “When you see someone that has dedicated their time to the industry, it is good to see him recognized. This is well deserved and I am very proud.”

When asked what advice Bill would give to Saskatchewan producers and the pulse industry, he replies, “Grow whatever pulses are good in your area. Keep a good crop rotation to help fight disease. Keep investing in research to help put pulses in more foods.” •



SPG director Lee Moats presents Bill Copeland with the Pulse Legacy Award at the Pulse and Special Crops Convention in Regina.

On Point

SPG Board of Directors Profile



**Jackie Carleton,
Director**

Jackie Carleton joined the Saskatchewan Pulse Growers Board in 2017. Jackie and her husband Brian manage and operate

a farm in southwestern Saskatchewan along with two of their sons. Yellow peas, large green lentils, and large Kabuli chickpeas comprise their pulses with durum, barley, and brown mustard rounding out their rotations. Aside from farming, Jackie began her agriculture career operating and managing a pulse processing, seed cleaning, and producer car loading facility. Following that, she worked as a grain brokerage agent prior to becoming the Purchasing Manager for the Pulse Division of LegumexWalker. In 2015 she traded her duties to focus on the operations of their farm. Jackie's background in business administration and leadership, as well as her keen interest in agriculture and her desire to continue to serve the industry, has given her the opportunity to have a seat on the board of SPG. Jackie currently serves as a SPG representative on the Board of Pulse Canada and is a member of SPG's Audit and Finance Committee, and Chair of the Nominations Committee. She is also a representative on the Pulse Industry Round Table and the Canadian Round Table for Sustainable Crops.

Undergrad Scholarship Winners

Five Saskatchewan high school students were recognized for their leadership, community involvement, and future plans to support agriculture and the pulse industry, receiving Saskatchewan Pulse Growers' Undergraduate Scholarships in June. All five students began secondary education programs this fall. Congratulations to the following recipients.



Cassidy McMunn
Star City — Edwards
School of Business,
University of
Saskatchewan



Tanesha Novak
Kuroki — College
of Agriculture and
Bioresources, University
of Saskatchewan



Landon Jarman
Climax — College
of Agriculture and
Bioresources, University
of Saskatchewan



Noah Aime
Redvers — College
of Agriculture and
Bioresources, University
of Saskatchewan



Rene Czemerer
Cupar — College
of Agriculture and
Bioresources, University
of Saskatchewan

Upcoming Events

SPG Annual General Meeting

January 14, 2019 TCU Place

The SPG annual general meeting will be held Monday, January 14, 2019 at TCU Place (35 22 St E, Saskatoon, SK) beginning at 5:00 PM. **You do not need to be registered for CropSphere to attend the AGM.**

If you are not able to attend in person, watch the AGM live on SPG's Facebook page.

CropSphere Registration

January 15 & 16, 2019 Saskatoon

The sixth annual CropSphere conference will be held at TCU Place in downtown Saskatoon. Be sure to secure your ticket to CropSphere 2019 and register starting November 1, 2018 at cropsphere.com. This year's agenda features keynote speakers former Saskatchewan premier Brad Wall, North Dakota farmer and motivational speaker Katie Dilse, and Michael Landsberg, former host of TSN's Off the Record and mental health advocate.

CropSphere will cover the topics of tariffs and trade, mental health in agriculture, sustainability, the right to repair your own equipment, compaction in soil, the latest market analysis on commodities, and more.

CropSphere is brought to you by Saskatchewan Pulse Growers, Saskatchewan Wheat Development Commission, Saskatchewan Canola Development Commission (SaskCanola), the Saskatchewan Oat Development Commission (Sask Oats), the Saskatchewan Flax Development Commission (SaskFlax), and the Saskatchewan Barley Development Commission.

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Select Seed Grower Meeting — Save the Date!

January 17, 2019 Saskatoon

The annual Select Seed Grower Meeting will take place on Thursday, January 17, 2019, at the Saskatoon Inn & Conference Centre.

Growers can expect to learn what is new with the Crop Development Centre's pulse varieties, get updates on the 2019 Variety Release Program, and receive the latest information on current topics of interest. This meeting is open to Select Status cereal/pulse growers and Foundation canola/mustard/rapeseed growers.

Advanced registration is requested — details will follow closer to the event date.

SPG 2019 Regional Meetings

February 4–7, 2019

The winter regional meetings will be held across Saskatchewan in four locations from February 4–7, 2019. Check for the location nearest you:

- Monday, February 4 — Rosetown (Rosetown & District Civic Centre)
- Tuesday, February 5 — Swift Current, Stockade Building, Kinetic Exhibition Park
- Wednesday, February 6 — Assiniboia, Prince of Wales Cultural and Recreation Centre
- Thursday, February 7 — Regina, Queensbury Convention Centre, Evraz Place

For recent news on
the pulse industry,
visit the SPG website
at saskpulse.com

Grower Profile

Tim Nerbas
Waseca, Saskatchewan



Why did you begin growing pulses?

I started growing pulses to add more crop diversity in my rotation. I also wanted to take advantage of the agronomic benefits of a crop that can fix its own nitrogen.

We grow hard red spring wheat, oats, barley, peas, and canola. We have thrown flax into our rotation from time to time, and this year we are playing with faba beans and soybeans as well. Crop diversity for us is important as it gives us different options for both timing when it comes to seeding dates and herbicides for our crops.

How long have peas been part of your crop rotation? What kind of peas do you grow?

I have been growing peas for over 20 years. Before I was personally farming full-time, I helped on my parents' farm and they also had peas in their rotation.

We primarily grow yellow peas.

What challenges have you encountered growing peas over the years?

Aphanomyces has impacted us the most on our clay/loam soils so we are trying to rotate in faba beans to help keep pulses on some of our heavier land. Weed control and disease management are still challenges for our pea crops. Some years are particularly tough, while other years the conditions are perfect for growing pulses. I spend a lot of time planning and scouting my crops, and I look at all the crop and weather data before I make my planting decisions. I am always cognizant of the fungicides and insecticides I use on my land because I want to make sure I am doing the best thing for not only this year's crop, but future crops as well.

Are there barriers to pea production in Saskatchewan, or is this an area where there is growth potential?

I always try to think of soil health and building soil health. My previous experience with the Saskatchewan Soil Conservation Association really has come into play with

my farming operations. I want to build up resilience in my soil to provide the most beneficial means to grow my crops.

I am playing around with intercropping to provide better stubble to help with soil erosion on my land while still allowing me to grow peas. With over 20 years of direct seeding and growing peas in our rotation, our soil is much mellower. As a result soil erosion is once again a concern during the spring runoff the year after growing peas.

Nonetheless I still think this province has great potential to grow more peas on more acres rather than merely sowing them on only the best fields that provide the best harvesting conditions. I have been hearing from more and more growers who are finding the benefits of intercropping peas with canola for both the standability and the harvestability of peas.

What would help drive pea production?

Developing a plant with more rigidity in its stem would be extremely helpful for pea production. To get more producers on board with growing peas, standability at harvest is the most important aspect. A nice standing plant would make life easier for harvest. Many growers will not grow peas because they do not appreciate putting rocks or soil through their combines. Anything that can improve the harvest process would be welcomed by growers across the board, and encourage more pea production.



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