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Ottawa Outreach 2018

In April, 2018, POGA sent an 8-member delegation to meet with Canadian Government officials representing both the agriculture and transportation sectors. The purpose of these meetings was to deliver key messages focused around the benefits of oats, grain transportation, the National Food Policy, continued oat research, and market access; particularly gaining access to the market in China. The delegation also took the time to reiterate the proud fact that Canada continues in its role as the largest exporter of oats in the world.



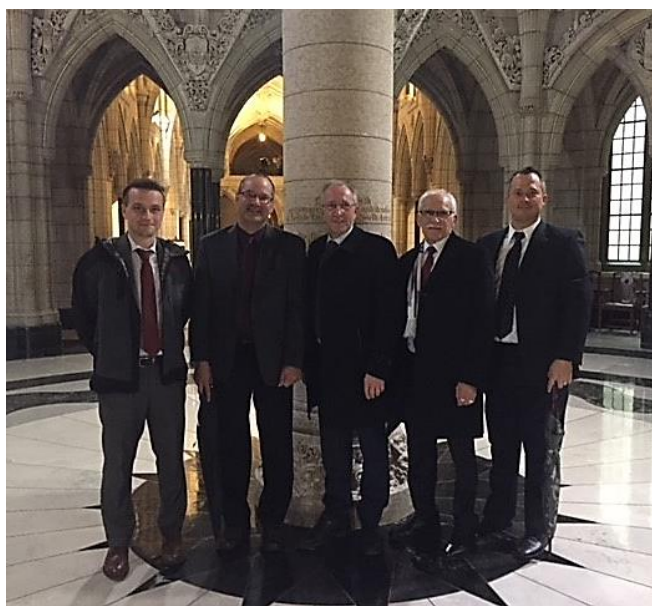
Left to right: Art Enns; Shawna Mathieson; The Honourable Lawrence MacAulay, Federal Minister of Agriculture; Bob Lepischak; Chris Rundel; Robynne Anderson

During this two-day tour, there were twenty-two meetings held with thirty-six officials. These meetings involved a wide cross section of officials including the Minister of Agriculture, eighteen Members of Parliament or their representatives, thirteen Members of AAFC and five transportation authorities representing the Canadian Transportation Agency, CP Rail, and CN Rail. This group of esteemed individuals also included seven members of the Standing Committee on Agriculture and Agri-Food and three members of the Standing Committee on Transportation, Infrastructure and Communities. There was also additional time spent at the Grain Growers of Canada Reception when many Members of Parliament, including The Honourable Lawrence MacAulay, the Federal Minister of Agriculture, were present.

Overall the delegation felt that the meetings were incredibly constructive and, due to the continuous work of POGA over the last few years to bring forward issues facing Western Canadian Oat Growers, many of

the officials were already aware of the issues and positions POGA brought to them.

Two key matters raised were the need to open the market in China for Canadian oats and encouraging the passing of Bill C-49 (which has subsequently happened). Many officials responded positively to the continuing work of further Canadian oat exports into Chinese and other markets, offering assistance where they could.



Left to right: Chris Rundel; Alan Butuk; Art Enns; Bob Lepischak; Brad Boettger visiting Parliament following question period.

Overall it proved to be a productive set of meetings which allowed for open conversation and the continued building of relationships between the Prairie Oat Growers Association and the Government of Canada. Already, Agriculture and Agri-Food Canada has updated its website to better feature the leadership role of Canadian oats in the global marketplace. These positive relations will help the continuing work to advance Canadian oats here at home and across the world.

See next page for a list of officials POGA met with....

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Complete List of Officials Met During POGA Ottawa Mission

- Lawrence MacAulay, Minister of Agriculture
- Candice Bergen, MP
- Luc Berthold, MP
- Kelly Block, MP
- Earl Dreeshen, MP
- Francis Drouin, MP
- Ted Falk, MP
- Alistair MacGregor, MP
- Larry Maguire, MP
- Joe Peschisolido, MP
- Judy A. Sgro, MP
- Robert Sopuck, MP
- Cathay Wagantall, MP
- James Auer, Representative for MP Eva Nassif
- Mark Choi, Representative for MP John Barlow
- Amine Karkach, Representative for MP Robert Aubin
- David Lahey, Policy Advisor for MP Cathay Wagantall
- Teddy Markey, Chief of Staff for Judy A. Sgro
- Spencer Rolfe, Member Assistant for Candice Bergen
- Donald Plett, Senator
- Shannon Church, AAFC
- Rick Fiarchuk, AAFC
- Fred Gorrell, AAFC and CFIA
- Lisa Guindon, AAFC
- David MacDonald, AAFC
- Katherine MacDonald, AAFC
- Tony McDougall, AAFC
- Keva McKennirey, AAFC
- Kevin Norris, AAFC
- Brian Rattray, AAFC
- Tom Rosser, AAFC
- Frédéric Seppey, AAFC
- Marco Valicenti, AAFC
- Steve Aubut, Canadian Transportation Agency
- John Corey, Canadian Transportation Agency
- Ryan Dallaway, Canadian Transportation Agency
- David Miller, CN Railway
- Robert Taylor, CP Railway

NOTE: All Oat Scoop article titles marked with an asterisk (*) indicate articles written by Pam Yule, Right Angle Business Services.

Optimize Oat Yield and Quality

Researching Fertilizer Management

Saskatchewan Oat Development Commission (SaskOats) has engaged Lana Shaw, South East Research Farm (SERF), to establish a one-year trial entitled, 'Managing Fertilizer Use to Optimize Yield and Quality of Oat.' Shaw states, "Potential benefits of nitrogen fertilizer use in oat are limited by its lodging effect on the crop and associated quality reduction of the oats. High nitrogen rates can reduce groat size with or without lodging. This project will demonstrate the effect of four different application rates of nitrogen on yield, quality and lodging of milling oat. The project will also demonstrate any additional potential benefits gained by using potassium fertilization. Potassium is recognized to be important for straw strength and may have a mitigating effect on oat lodging in some environments."

SaskOats and SERF intend to add to data collected by William May in a 2015-2016 research project located at SERF's Redvers site, which evaluated various milling oat varieties for test weight stability using four nitrogen application rates. In order to determine if the growing region will affect results, trial plots for this year's project will be established at two different locations: the Conservation Learning Centre (CLC) site near Prince Albert (northern region), and SERF's site in Redvers (southern region). Shaw affirms, "The same nitrogen rates that were evaluated by William May have been chosen in order to continue adding to those results and facilitating demonstration of them."

The trial will examine two factors (nitrogen and potassium) with four replicates and eight treatments - four treatments with various nitrogen application rates only (the same rates as May used in his project) and four treatments with the various nitrogen application rates plus a consistent potassium application rate.

Measurements and assessments will be made for:

- plant establishment
- crop height
- lodging (late milk/early dough and pre-harvest stages)
- yield and grain moisture
- test weight
- seed weight
- quality (plump versus thin seeds)

Rainfall quantity and timing, as well as soil moisture, will also be recorded.

The trial began this spring and will conclude this year; the final report will be completed by February, 2019 and the results will be posted to poga.ca. This project is co-funded through the Agriculture Demonstration of Practices and Technology (ADOPT) and is made possible through the federal/provincial cost-shared Growing Forward 2 initiative.

POGA Talks to the Millers at The North American Miller's Association Conference*

Shawna Mathieson, POGA Executive Director, and Art Enns, POGA President, travelled to Naples, Florida to present at the North American Millers' Association (NAMA) 2018 Spring Conference. NAMA has been holding these conferences since 1998. Business meetings of the soft wheat, corn, and oat millers provide each industry the opportunity to discuss crop-specific issues with members of NAMA's Technical Committee. A general session is also held, which brings together all three groups for speaker presentations of interest to all crop groups. The conference, which draws over 200 members and guests each year, provides a platform for interested parties to network and share.

"The NAMA conference is a great place to meet with all the oat millers across North America to have frank discussions on what's happening in our industry," says Mathieson. "A few key things which are always discussed is the pricing of oats and whether it is competitive enough to attract acres. This year the answer was 'no' for many regions of Western Canada, but it's also known that there's significant carryover from last year which has the millers feeling very comfortable with their positions and not needing to increase pricing. With oats being a relatively small crop it's vital that our organization maintains the relationship with the industry and represents Western Canadian Oat Growers. There's really a small number of oat buyers and they impact our industry in a huge way, not only in terms of pricing to the growers but also with help funding projects that otherwise would simply not be possible."

POGA's 25-slide presentation on March 25 provided proof that Mathieson could possibly 'talk oats' all day. The bullet points listing POGA's activities (which now includes over 30 projects, a full list is available at www.poga.ca - under [poga/current programs](#)) really drives home what an engaged and active association that oat producers have representing them! Topics included research and marketing projects (new and awaiting funding), as well as POGA successes, concerns and the producer perspective on issues that drive decisions at the farm level and how those issues affect producers' commitment to oat acres.

POGA has set guidelines for how to focus its efforts to best serve oat growers and allocates a percentage of total resources to get each of those jobs done. Research, ideally, receives 35% of POGA's focus and the lengthy list of current research projects, plus the research 'wish list', indicate a very efficient system is in place to accomplish all that within the allocated existing resources. The research projects list also demonstrates to millers that POGA is working hard to concentrate research on oat attributes that serves current milling industry needs.

Marketing efforts ideally receive 40% of POGA's resources and, while the list of marketing projects is much shorter, the smaller number of active projects is justified by the time and travel costs to countries such as China and Mexico to market, and work on access issues for, Canadian oats. Mathieson explains, "Marketing projects are eligible for less Government funding than research projects (a maximum of 50% can be received

for marketing programs where research is allowed up to 75%) and there is a limited number of funding programs for marketing. FYI, it's not uncommon for a marketing project to cost growers 10 to 15 times more than a research project simply because of the reduced funding opportunities and the cost to advertise. However, the Board also knows that without someone to buy the oats there's no reason to grow them!"

Statistics provided by Mathieson confirm those efforts have paid off. Imports of oats into Mexico show a healthy increase of Canadian oat exports to Mexico occurring since this program started in 2015 (2015, 2016 and 2017 are the highest exporting years to Mexico in Canada's history). Participation numbers in OatsEveryday, a project focused on USA consumers, prove that those consumers are very interested in learning new and diverse ways to prepare healthy meals with oats. POGA's work in China was acknowledged by Agriculture and Agri-Food Canada's (AAFC) Asia Division as being exactly what was needed to take a first step toward a Canadian phytosanitary agreement to allow raw oats for feed and food use into China. This first step was achieved when oats were included in a 2018 work plan signed by Administration of Quality Supervision, Inspection and Quarantine - People's Republic of China (AQSIQ) and Canadian Food Inspection Agency (CFIA) in November 2017. "Oat imports into China have been growing steadily since 2006. In fact, they have increased nearly 55 times since 2006, but currently that market is served primarily by Australia since raw Canadian oats are not allowed into this market (yet)," states Mathieson. "POGA applied for access to this vital market in 2015 and continues to work through this process with the Government of Canada."

POGA also sent several Board members (and its Executive Director) to Ottawa to keep government informed of issues affecting the industry. Topics of discussion included access to new markets (e.g., China and India) and existing markets (e.g., the USA and Mexico); transportation; Government funding; and the importance of consumer awareness of the health benefits of oats.

Mathieson wrapped up the presentation by providing projection numbers for seeded oat acres and varieties by province for Saskatchewan and Manitoba. And, just to prove others were listening, World-Grain.com picked up on a discrepancy between an Agriculture and Agri-food Canada (AAFC) forecast for the number of Canadian hectares seeded to oats this spring versus numbers provided by Mathieson. Randy Strychar, President of Oatinformation.com, is also quoted in the article. If you are interested in reading the article for yourself, search on World-Grain.com for the article entitled, "AAFC Canadian oats forecast called into question."

Art Enns, POGA President, remarks, "Without an oat industry there's no reason to grow oats. Therefore, POGA will continue to work to enhance our industry relations work with the millers, handlers and processors to move the oat industry forward. Part of this work is done by attending events like the NAMA conference and encouraging our industry to attend events like the POGA AGM each year."

Does Seed Size Improve Oat Vigour?

A Demonstration Trial to Answer that Question

Mike Hall, Research Manager of East Central Research Foundation (ECRF) approached POGA to conduct a trial this summer, entitled, 'Oat Vigor Improves with Larger Seed Size'. The Oat Grower Manual, initiated and funded by POGA and found at the poga.ca website, recommends a plant population of 20-30 plants/ft² and using Thousand Kernel Weight for seeding rate calculations (see the Seeding section of the Manual). This project sets out to further demonstrate to producers the role seed size plays in plant vigor and to add to the data obtained from past research based on seed size.

Hall states, "The objective of the project is to demonstrate how seedling vigor in oats can be improved by screening for a larger seed size. Vigorous seed will be shown to have greater emergence, improved stand establishment, greater competitiveness against wild oats, earlier maturity and greater yield. The importance of using 1000 kernel weight when determining seeding rates will also be demonstrated."

Two field trial plots will be established: one at the East Central Research Foundation (ECRF) site and the second at the Indian Head Agricultural Research Foundation (IHARF) site. Two factors will be studied:

1. a comparison of seed size - small (26 g/1000 kernels), large (42 g/1000 kernels) and unscreened (41 g/1000 kernels), and
2. a comparison of seeding rates (100, 200 and 300 seeds/m²).

Hall explains, "The unscreened seed lot is also thrown into the comparison to make sure screening for a large seed size was worthwhile (i.e., large seed performed better than unscreened)."

To keep this short trial manageable, seeding depth will not become an official factor in the trial. Seeding depth is set at a (shallow) 1" and four replicates will be performed for the seed lots included in the two-order factorial trial. For added interest, though, Hall adds, "Three deep-seeded treatments of the three seed sizes, seeded at 200 seeds/m², will also be added to the trial. Having some deep seeded treatments will help separate vigor differences between the seed sizes, 'separating the men from the boys' if you will."

The trial began in April, 2018 and field work ends with this fall's harvest. "Already, we can visually see a vigor difference between the small and large seed in the field this spring," states Hall.

Trial results will be completed in spring, 2019. Hall sums up the purpose for the trial by stating: "Planting vigorous seed is the first step towards producing a high yielding quality oat crop. Vigorous seed provides better stands particularly under stressful conditions such as cold soils, excessive seeding depth and heavy weed competition (i.e., wild oats). A simple means by which producers may be able to improve the vigor of their own seed lots is to clean it to assure a large seed size. Using large vigorous seed may provide economic returns to oat growers."

This project is co-funded through the Agriculture Demonstration of Practices and Technology (ADOPT) and is made possible through the federal/provincial cost-shared Growing Forward 2 initiative.



Photo taken June 11, 2018. Left: Small (26 g/1000 kernels) seeded 1.5" deep. Right: Large (42 g/1000 kernels), seeded 1.5" deep. Already you can see the emergence and plant size is better for the large seed size. Now... will that turn into better yields? That is the question!

Intensive Agronomy & Oats

Research for Decisions That Affect Yield & Quality

Saskatchewan Oat Development Commission (SaskOats) has engaged Jessica Pratchler, Northeast Agriculture Research Foundation (NARF) to establish a one-year trial entitled, 'Improving Oat Yields with Intensive Agronomy.' Pratchler states, "The objective of this project is to demonstrate the relative contributions the most basic management decisions make to oat yield and quality. Traditionally, oats have been grown using moderate- or low-input production practices, as they are still able to produce high yields. However, some producers are willing to adapt new production practices in order to increase yield, quality, and profitability. Producers are willing to increase their fertility regimes but this needs to be balanced against lodging and delayed maturity, which oats are susceptible to. Using glyphosate can assist with these issues, however, some oat millers will not accept oats sprayed with glyphosate as a pre-harvest application. Some studies have shown that maturity can be accelerated by higher seeding rates, early seeding, and increased fertility; therefore, this may minimize the need for pre-harvest glyphosate and contribute to greater yield and quality. To determine effectiveness of the research management practices, comparisons will be made using more traditional types of oat management, such as low seeding rates (200 seeds/m²) and low nitrogen rates (70 kg N/ha) in each seeding date treatment."

The trial will examine the effects that seeding date and rates, as well as nitrogen fertilizer rates, have on oat yield. Six early-seeded oats of the same variety will be planted using 200, 300 and 400 seeding rates. The oats will receive nitrogen fertilizer at either a high or low rate. Six late-seeded oats will then be planted using the same seeding and nitrogen fertilizer rates.

Measurements and assessments will be made for:

- plant density
- lodging (using the Belgain lodging scale)
- wild oat ratings (wild oats will not be hand-weeded out)
- yield
- test weight
- kernel size
- plump and thins (sieved for large and small)

The trial began this spring and will conclude this year; the final report will be completed by January, 2019 and the results will be posted to poga.ca. This project is co-funded through the Agriculture Demonstration of Practices and Technology (ADOPT) and is made possible through the federal/provincial cost-shared Growing Forward 2 initiative.

Cajun Popcorn Shrimp

Irresistible, bite-sized Cajun-spiced shrimp with a crispy, golden oat breading will be the hit of your next gathering.



PREP TIME 70 mins | COOKING TIME 10 mins | TOTAL TIME 80 mins | SERVES 4

CATEGORY: Appetizers and snacks; Gluten-free

Ingredients:

- 10 oz 70/90 frozen raw peeled shrimp, thawed and drained (300 g)
- 1 tbsp Cajun seasoning (15 ml)
- 1/2 tsp salt (2.5 ml)
- 2 tsp canola oil (10 ml)
- 1/2 cup oat flour (125 ml)
- 1 cup quick oats (250 ml)
- 2 eggs, lightly beaten
- Oil for frying

Instructions

1. Combine shrimp, oil, salt and Cajun seasoning in a bowl, stirring well to coat. Cover and refrigerate for one hour.
2. Preheat oil in deep fryer or deep, heavy-bottomed pot, to 350° F (175° C)
3. Pulse oats in food processor to coarsely chop.
4. Set up your breading station: place flour, oats and beaten egg in three shallow bowls.
5. Remove shrimp from bag and dredge with flour. Shake off excess.
6. Transfer shrimp to egg, turning to coat, then roll in quick oats.
7. Fry shrimp in batches for 3-4 minutes, or until breading is golden and shrimp is cooked through.
8. Remove from oil, drain on paper towel. Serve with wedges of lemon and tartar or remoulade sauce.

Crop Sequencing Project Update

In the November, 2017 Oat Scoop, POGA introduced you to the Crop Sequencing of Large Acre Crops and Special Crops Project, which is being conducted by Bill May at the Indian Head Agriculture and Agri-Food (AAFC) Canada Research Farm. We touched base with Bill to ask how things have progressed.

May states, "I now have two years of data collected. Grain yields have been calculated at 5 sites over two years with grain quality still being measured at two more 2017 sites. The two years were very different; 2016 was very wet at times and 2017 started with a soil full of water but the precipitation was low through the growing season. Indian Head received 42% of its average rainfall in 2017. In the following tables from three sites in 2016 and two in 2017 you can see that there is some variation in the effects of the eight stubbles on oat yield."

May continues, "Canola is a good example of this variation. Canola was among the best stubbles for

seeding oats into at Saskatoon in 2016 and among the worst at Swift Current in 2016 and 2017, while it was middle of the road at Indian Head in 2016 and 2017. There were some consistencies in 2016. Oats had a lower yield when grown on oat or canaryseed stubble and an increased yield on pea stubble and quinoa stubble, however in the dryer conditions of 2017 these differences tended to disappear as the taller cereal stubble tended to shelter plants during early development. There is much more work to be done before broad recommendations are made."

The field work wraps up in 2019 and a final report will be produced in 2020. Contributors to the project are: The Prairie Oat Growers Association (POGA), Saskatchewan Wheat Development Commission, Western Grains Research Foundation (WGRF), Canaryseed Development Commission of Saskatchewan, and the Agriculture Development Fund (ADF) of Saskatchewan and is made possible through the federal/provincial cost-shared Growing Forward 2 initiative.

The effect of crop stubble on OAT yield in 2016 and in 2017 (bu/ac)											
	2016							2017			
Stubble	Indian Head		Swift Current		Saskatoon			Indian Head		Swift Current	
Wheat	146	b*	162	c	206	bc		114	a	54	ab
Oat	135	C	153	c	164	d		109	ab	54	ab
Canola	146	bc	158	c	219	a		106	ab	51	b
Pea	150	ab	183	a	218	a		109	ab	52	ab
Canaryseed	135	C	164	bc	179	d		107	ab	52	ab
Hemp	160	A	184	a	186	cd		96	b	54	ab
Quinoa	158	A	183	a	233	a		113	ab	60	a
Coriander	150	ab	177	ab	170	d		113	ab	49	b

The effect of crop stubble on CANOLA yield in 2016 and in 2017 (bu/ac)											
	2016							2017			
Stubble	Indian Head		Swift Current		Saskatoon			Indian Head		Swift Current	
Wheat	35.5	a	50.6	ab	71.0	ab		40.0	a	15.0	ab
Oat	37.5	a	49.3	ab	72.0	ab		35.3	ab	13.2	abc
Canola	33.7	ab	46.7	b	66.1	bc		28.4	b	18.3	a
Pea	40.7	a	57.0	a	88.2	a		38.0	a	7.6	c
Canaryseed	38.3	a	49.1	ab	48.6	cd		36.8	a	9.2	bc
Hemp	38.1	a	55.1	ab	60.2	b		23.8	b	10.5	bc
Quinoa	40.8	a	52.0	ab	64.9	b		36.6	a	13.4	abc
Coriander	27.1	b	52.6	ab	34.2	d		36.8	a	9.4	bc

*NOTE: lower-case letters in a column followed by the same letter are not significantly different according to the least significant difference test ($P \leq 0.05$). May explains, "For example, when oat was grown at Indian Head the highest yields were achieved on hemp, quinoa, coriander and pea stubble in 2016 and have been given the letter a. Wheat stubble had a lower yield than hemp and quinoa stubble and is given the letter b. The yield on pea stubble was close enough to the wheat stubble yield that they did not differ statistically so pea stubble gets the letter b as well as a. The oat and canaryseed stubble both had a lower oat yield than the other six stubbles, except canola, and are given the letter c." Please note, the letters show a comparison of yields within the same growing location only, not between different locations (so it is not accurate to use these charts to compare between Swift Current and Saskatoon, for example).

POGA Entices Incoming Buyers*

Saskatchewan Trade & Export Partnership (STEP)

Saskatchewan Trade & Export Partnership (STEP) held an incoming mission: the 2018 Middle East and North Africa (MENA) Trade Conference on April 25, 2018 in Saskatoon. At the request of STEP, POGA sent Executive Director Shawna Mathieson to advocate on behalf of Canadian oats and oat producers. STEP recruited members from Saskatchewan pulses, special crops, cereals and feed suppliers and exporters to meet international incoming buyers from countries in the MENA region (MENA countries include Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Libya, Malta, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank and Gaza). Added features of the conference were 'business to business' (B2B) meetings, where buyers and industry members were able to meet face-to-face to discuss specific needs; in addition, participants attended plant and farm tours.

One of the statements from STEP's website sums up its mandate: "Saskatchewan Trade and Export Partnership (STEP) champions the province's export industry and assists provincial businesses in realizing global marketing opportunities." STEP introduced MENA participants to Saskatchewan by way of a Product Profile: "Saskatchewan is world-renowned as a consistent supplier of high-quality, safe agricultural products, including for a variety of foods such as pulses, cereals, oil seeds, processed food, snacks and bars. Saskatchewan is one of Canada's leading agri-food exporters with international sales of \$14.4 billion in 2016. Exports in the province's key sectors (oilseeds, pulses, cereal grains and edible oils) total more than \$1.5 billion each. Saskatchewan is a major world supplier of food ingredients, food, livestock, and natural & organic products. Saskatchewan's food & beverage industry produces about 22% of our province's total manufacturing and processing output. Saskatchewan foods are set on dinner tables around the world."

Mathieson took the stage to explain the part oats play in Saskatchewan's solid agricultural reputation. The presentation was customized to introduce Canadian oats to an audience who may be less familiar with the crop, and included general information, such as:

- the suitability of Canada's climate for high-quality and -quantity oat production,
- health benefits attributed to eating oats, and
- products containing oats, including food, of course, but also products like lotions, sunscreen and drinks.

Statistics were presented (thanks to leading oat analyst Randy Strychar, President of Oatinformation.com) indicating increased oat milling and export activity, which demonstrate a strong and increasing oat-food demand (versus the decreasing, historical demand for livestock feed oats). Canada leads the world's oat-exporting countries at a whopping 75% of total world oat exports, and Canada exports approximately 50% of all oats grown in the country.

Stressing the real and increasing demand for oats and oat products to buyers from countries less familiar with the product can't help but create interest from those buyers. Oats have so much to offer in the way of protein, β -glucan benefits, gluten intolerance, fiber, low saturated fats, no trans-fatty acids, nutrients, and 6 of the 8 amino acids necessary for life. Another benefit? Let's face it - oats are relatively easy on the pocket book compared to other foods that pack as many healthy punches!

Incoming buyer conference participants came from the following countries: Egypt, Israel, Jordan, Lebanon, Morocco, and Tunisia. This interest is a promising advance in POGA's marketing outreach and POGA will continue to spread the word to the world about the goodness of oats.

POGA Also Presents at....

Mathieson also spoke to the Canadian International Grains Institute (CIGI), based in Winnipeg, in preparation for the Canadian Grain Industry Overview program in June. This presentation was customized to address CIGI's focus on Canadian grain companies. These companies are interested in learning more about POGA's work and funding and the challenges oat growers' face. POGA always welcomes interest from related organizations and does its best to provide information tailored to the interested audience.



Oats - At Home in the Lab*

Three Projects - One Grain (Oats)

A Healthy Non-Dairy Creamer from Oats

Dr. Lingyun Chen, Canada Research Chair in Plant Protein, Structure Function and Nutraceutical Delivery at the University of Alberta, has now completed the 'Oatmeal Coffee Additive' project and final report. Why did Dr. Chen and her team look to oats as a coffee creamer? Oat has some very special properties, which is no surprise to POGA members.

North Americans are consuming an increasing amount of coffee. However, there is also an increasing demand for allergen-free products. People who love the qualities that coffee enhancers provide to their morning 'cup of joe', but who also experience allergic reactions to products currently available, will welcome an alternative to dairy- and soy-based creamers. As well, most people are attracted to new and improved products that provide additional health benefits.

Chen says, "Oats is the logical choice for development of a non-dairy creamer. Oats have functional/ nutrition proteins; they have high levels of beta glucan; and they can be utilized fairly well in beverage applications. A comparison of oat protein functionalities to other plant-based protein blends showed that oat proteins were the most suitable choice to replace the milk and dairy proteins within the creamer. The knowledge generated through this research can be applied to the development of other non-dairy, oat-based products, such as yogurts, cheeses, frozen desserts, and ready-to-drink beverages."

Consequently, information gleaned from this project might blossom into research for other food-based applications because of the same functional/ nutritional qualities that made oats a candidate for a good coffee creamer. Dr. Chen states that a competitive product must have: "at least 6-10 grams of protein and 1 gram of beta glucan per serving, be soluble in coffee, and have comparable taste, colour, and texture properties to other coffee creamers."

Chen compared emulsifying properties of several kinds of plant proteins, including oats. Qualities such as whitening effect and feathering (so named for its visual effect) in coffee were measured and formulations tweaked until Chen was satisfied with the results. The next challenge was to move from the liquid mixture and develop a dry powder product that would disperse easily in hot coffee. Various ingredient additives were tested to achieve this result because no one likes lumpy coffee. Dry samples were then sent to Oatdeal (see the Mar/18 Oat Scoop) for industry evaluation. Oatdeal provided Chen with their observations and Chen's team began tweaking once more.

Research is a back-and-forth, round-again process and many more tests, adjustments and measurements were performed before Chen felt they had developed a product worthy of this Summary Statement: "The results demonstrate good potential for oat protein as an emulsion stabilizer for coffee creamer. The current developed formation contains 30g of plant protein per 100g powder, which is much higher than the coffee creamer products in the market and allows protein claims for the future developed products."

"Research like this is vital not just for the results we see in this one product, coffee creamer, but also the potential it has for future product development. Hopefully research like this could lead to more Canadian oats in products on grocery store shelves around the world," says Brad Boettger, Alberta Oat Commission Chair and POGA Vice-President.

We won't see oat creamer on the shelves quite yet, but Dr. Chen and her team have nudged the possibility a little closer to reality.

Oat-Based Beverages - And an Added Bonus

Dr. Chen has completed the first annual progress report for a three-year project entitled, 'Development of an Oat-Based Beverage' - but the project name doesn't really describe the noble impact this research could have should one of the products be developed and offered on store shelves. However, Dr. Chen's project objectives enlighten us: "This collaborative industry project is focused on developing two oat-protein-based beverages. The initial oat-based beverage will be developed in collaboration with Oatdeal and will be a ready-to-drink, oat-protein-enriched product. The second will be a nutritious, oat-based beverage that possesses the necessary sensory and nutritional properties to improve the quality of life of patients who are undergoing radiation therapy."

Let's look at the second beverage first. Cancer patients receiving radiation therapy struggle to eat and keep food down. This side effect of treatment affects patients' ability to absorb nutrients to support healing. Chen says, "To date there have been very few beverage/nutritional products that are targeted towards meeting the dietary needs of these patients. An objective of this project is to develop a plant based, protein and beta-glucan enriched beverage, further enhanced through the addition of vitamin D and omega-3 fatty acids to the formulation."

Alan Butuk, SaskOats Chairman and POGA Vice-President, talks a little bit about why POGA is supporting this project: "This product targets a relatively limited, but extremely important, market group. POGA is proud to be supporting work that will address an issue that affects family and friends everywhere and could, maybe, even lead to more oats consumed. A win-win situation for everyone involved."

The beverage being developed in collaboration with Oatdeal (see the Mar/18 Oat Scoop) will answer the needs of a broader market. Oatdeal currently produces an oat-based powder customers use to create their own, nutrition-packed 'smoothies'. This project sets out to create a ready-to-drink product which will provide consumers with additional convenience and product consistency and provide the health benefits oats offer.

In order to carry out the research, Chen's team must first develop new processing procedures before proceeding to develop the beverages themselves. This work requires specialized equipment, some of which has been obtained specifically for this project. Dr. Chen reports good progress on the first year's work. The project is expected to be completed in 2019 and the final report is expected by early 2020.

Oats at Home in the Lab, continued...

Oats Product Development

You read about Dr. Chen's project, 'Product Development from Gluten-Free Oat Fractions' in the Mar/18 Oat Scoop. This project is still in progress and POGA expects to have the results in 2019. So, stay tuned for more news about research into oat proteins and potential product development!

All three projects are partially funded by POGA and The Alberta Crop Industry Development Fund (ACIDF). *Regrettably, as of June 6, 2018, ACIDF is no longer in operation. POGA thanks ACIDF for their support of crop-based research and their philosophy of directing research funding toward the 'circle of benefit', resulting in research support across provincial borders.*

Integrated Disease Management

A Project to Manage Disease in Oats

Saskatchewan Oat Development Commission (SaskOats) is supporting a research project being undertaken by Northeast Agriculture Research Foundation (NARF). 'Improved Integrated Disease Management for Oats in Saskatchewan' is a three-year study (2018-2020) that focuses on controlling disease in various oat varieties.

Jessica Pratchler, Research Manager at NARF, will be coordinating this project each year at Indian Head, Melfort, Redvers and Yorkton, in addition to managing the Melfort site. Pratchler states, "This project is trying to answer growers' questions surrounding fungicide use in oats. Fungicide application on oats may, at times, create risks of delayed maturity depending on regions and varietal maturity. Some growers are more hesitant to apply fungicide on diseased oats than on other cereals as the payback is not always clear. Also, foliar diseases such as rust are more prevalent in southern Saskatchewan growing areas than in the northern areas and so the growing region and climactic conditions have a direct effect on the targeted diseases. In some areas, good genetic resistance may be enough to combat disease, but in other areas, fungicides may be an economical option despite their potential to delay maturity. Fusarium head blight can also affect oats, but we do not know as much about controlling it in this crop, so this presents a new research opportunity. As in other cereal crops, higher plant densities can help to reduce tillering, which is important for disease control and targeting heading diseases. This research may also help growers to decide if fungicide application is necessary and make the staging easier. Each variety also has its own unique attributes so we are using two contrasting varieties, Camden and Summit, to determine differences and determine costs vs. benefit of fungicide use in oats."

Two seeding rates for each variety will be used, receiving three different fungicide treatments (untreated, treatment at flag leaf stage, and treatment at heading stage).

Data that will be recorded and measured includes:

- plant density: four weeks after seeding
- tiller density: prior to fungicide application at flag leaf stage
- rust and leaf spot ratings
- Fusarium Head Blight (FHB) infection: prior to maturity

- lodging: at physiological maturity using the Belgain Lodging Scale
- maturity: at the first detection of dry down
- yield: the entire combined sample and correcting for 13% moisture
- quality: Thousand Kernel Weight (TKW)
- Beta-Glucan and milling: submitted for β -glucan and milling analysis - plump, thins, groat, test weight
- disease analysis: accredited lab analysis for all fusarium species on seeds

This project should add to the knowledge bank and provide data collected from various locations across the province to help producers keep their oat crops healthy and to assist in controlling disease.

SaskOats will receive intermediary reports for each year of the project, and the final report is expected in spring, 2021. Research reports will be posted to poga.ca. This project is co-funded through the Agriculture Development Fund (ADF) of Saskatchewan and is made possible through the federal/provincial cost-shared Growing Forward 2 initiative.



SaskOats

Annual General Meeting

Tuesday, January 15, 2019
TCU Place (as part of CropSphere)
Saskatoon, SK
Free admission to the AGM

Agenda*

- 1:30 pm Opening remarks from SaskOats chairman, Alan Butuk
- 1:35 pm **SaskOats Annual Business Meeting****, Alan Butuk of Insinger, Chair
- 1:50 pm **Diversifying Markets: Update on China Market Access and Mexico Campaign**, Robynne Anderson, President, Emerging Ag
- 2:15 pm Adjourn

**Times and agenda topics subject to change; for updates, check poga.ca*

****Please note:** Per the announcement at the 2018 Annual General Meeting, a 30-day notice for resolutions is required at the Saskatchewan Oat Development Commission (SaskOats) Annual General Meeting. Please send any resolutions to smathieson@poga.ca no later than 5pm December 15, 2018.

CropSphere
Ideas, Innovation, and Knowledge



Annual General Meeting

Date:

Wednesday, February 13, 2019,
2:40pm

Location:

Victoria Inn Hotel and Convention Centre,
Winnipeg, MB
(as part of The CropConnect Conference)
Free admission to the AGM

Come Enjoy a Free Oat Beer from a Local Manitoba Brewery and hear what the Oat Growers Commission is doing for you!

Agenda*:

- 2:40 pm **Welcome** from MOGA President, Ray Mazinke
- 2:45pm **MOGA Annual Business Meeting****, Ray Mazinke
- 2:55pm **Oat Market Outlook**, David Drozd, Senior Marketing Analyst, AgChieve
- 3:20pm **Adjourn**

**Times and agenda topics subject to change; check poga.ca for updates*

****Please note:** a 30-day notice for resolutions is required at the Manitoba Oat Growers Association's Annual General Meeting. Please send any resolutions to smathieson@poga.ca no later than 5pm January 13, 2019



CropConnect
Conference



Annual General Meeting

Monday, January 28, 2019

(Monday before FarmTech 2019)

Location

The Edmonton Westin, 10135 100th Street,
Edmonton, AB T5J 0N7
Turner Valley room

Agenda*:

- 6:30pm **Complementary Drink plus a Light Meal**
- 7:00pm **Welcome** from the Alberta Oat Growers Commission
- 7:05pm **AOGC Business Meeting***; Brad Boettger, Chairman from Tofield, AB
- 7:15pm **Director Elections/Director Acclamation**
- 7:30pm **Sandeep Nain, General Manager, Gateway Research Organization** – Results from Three years of Oat Variety Trials in Westlock and Falher . . . will New Varieties beat Morgan 3 years in a Row???
- 7:50pm **Mark Hemmes, President, Quorum Corporation** – Rail Transportation, What Changes with the Implementation of Bill C-49 and How Might it Impact Producers?
- 8:25pm **John Loogman, Rycroft Elevator Manager/Grain Buyer AB/BC, Grain Millers Canada** – Alberta Oat Markets: What can Alberta Farmers Expect in Terms of Price for 2019?
- 8:45pm **Adjourn**

**Times and agenda topics subject to change; check poga.ca for updates*

For those who stay through the end of the meeting AOGC will provide another complementary drink ticket.

Please RSVP to info@poga.ca to ensure enough food is ordered. There is no charge for this event.

***Please note:** a 30-day notice for resolutions is required at the Alberta Oat Growers Association's Annual General Meeting. Please send any resolutions to smathieson@poga.ca no later than 5pm December 28, 2018.



POGA'S 21st ANNUAL CONFERENCE

Thursday, December 6, 2018
Sheraton Cavalier, Saskatoon, SK
South West Room

Agenda*

8:00am	Registration and Free Hot Breakfast
8:40am	Welcome and Introduction – Art Enns, POGA President
8:45am	Oat Market Outlook , Chuck Penner, LeftField Commodity Research
9:45am	What the Dickens has Oat Genomics Done for You Lately? The Groats of Christmas Past, Present, and Yet-to-Come , Nick Tinker, AAFC Research Scientist in Cereal Genomics
10:15am	POGA Annual General Meeting – Art Enns, POGA President
10:30am	Coffee Break
11:00am	Disruptors in Agriculture , Marty Seymour, Director, Industry and Stakeholder Relations, Farm Credit Canada
12:00pm	Soup and Sandwich Lunch – Tour the Sponsor's Displays
1:00pm	Diversifying Markets: Update on China & Mexico , Robynne Anderson, President, Emerging Ag
1:45pm	The Ever Changing Climate: The Weather to Expect Beyond 2018 , Dave Sauchyn, Ph.D., Professor, Prairie Adaptation Research Collaborative
2:15pm	The Oat Superstars, a Few Activities the POGA Directors and Staff have been Involved in.
2:30pm	Beyond Market Access: the Potential in the New Multitude Trade Agreements and the Plant Protein Supercluster , Carlo Dade, Director, Centre for Trade and Investment Policy, The Canada West Foundation
3:15pm	Coffee Break
3:45pm	Hey Agriculture: Did You See What They Did to the Canadian Energy Sector? Don't Let it Happen to You , Brad Wall, Senior Advisor, Osler, Hoskin and Harcourt LLP and previous Saskatchewan Premier
5:00pm	Wrap-up and Adjourn – Art Enns, POGA President
5:45pm	Social Hour at the Sheraton Cavalier
6:30pm	Dinner and Speaker: – How Making Oat Vodka and Whiskey is Highly Unique and Specialized , John Cote, Black Fox Farm and Distillery (additional fee applies)
8:00pm	Adjourn

Daytime seminars, breakfast and lunch \$20.00 (\$25 at door)

Optional Evening Banquet \$50.00 (\$60 at door)

**Times and agenda topics subject to change.*

For updates, pre-registration and credit card payments - visit poga.ca

Note: For those arriving on December 5, there will be a meet and greet beginning at 8pm in South West room of the Sheraton Cavalier

The Next Generation of Oat Growers



Saskatchewan (June 8)

FOR MORE PICTURES OF
OAT CROPS ACROSS
WESTERN CANADA
VISIT WWW.POGA.CA



Manitoba (June 20)



Alberta (June 21)

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