











#### NOVEMBER 2017

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## Jim Dyck, Oat Advantage

- article written by Pam Yule

## A (Good) Oat Obsession

Jim Dyck has built his business, Oat Advantage, and his recent working life around oats. Continual improvement of what currently exists is a big part of his business plan. It's been a long journey from his job with United Grain Growers to self-employed oat breeder. Jim and his wife, Laura-Lee, started Oat Advantage in Saskatchewan in 2008, "We have four children: Lauren, Elena, Graeme and Colin. They each have their own interests and leanings in what they like to do on the research farm. I like to use the farm as a teaching tool for them. We live in the city but have a growing connection to our nearby farm. Around the supper table, and elsewhere, there is always conversation of plant breeding, agriculture, the environment, etc. They all like to be a part of Oat Advantage even if they are busy with their own lives. It is great and has been a true privilege to run this Oat Advantage project as a family operation."

Jim holds a M.Sc. from the University of Saskatchewan, a B.Sc. in Plant Science from the University of Manitoba and a P. Ag., and he uses all of his education in his business. "Agronomy focuses on how to successfully grow crops. Breeding involves creating better varieties for over-all production and all players must be considered: the grower, buyer, miller, processor and consumer," says Jim.

Education is important, but knowledge and experience is also gained and shared with others involved in the industry. "I visited with farmers this summer, particularly those growing my varieties, and that was a big learning opportunity for me on the oat breeding end to see where my direction fits with farm operations. I also attend industry meetings, and we discuss all things oat-related. This is only one of the ways we continually learn from each other simply by talking shop." Jim also feels that there is a good community with others in the research and development area of the oat industry. Scientists such as Jennifer Mitchell Fetch, Research Scientist with Agriculture and Agri-Food Canada and Aaron Beattie, Associate Professor at the Crop Development Centre, University of Saskatchewan, help keep the oat research conversation current and relevant to the oatgrowing sector.

When asked what would have to happen in order to see more oats grown on the prairies, Jim responded, "Non oat growers would have to become envious of oat-growers and oats have to become a more indispensable part of a farm." So, how would that happen? Well, increasing the demand for oats in Canada and beyond, and boosting recognition of the value of oat nutrition and of planting oats in rotation with other crops is part of a good strategy. Jim, POGA

and many others are working to accomplish those goals and more.

Jim will be giving a presentation at 2017 POGA Annual General Meeting (AGM) and conference, December 7, 2017 in Banff, AB. His talk will include an update of the POGA Online Grower Manual and current results of the Oat Advantage breeding program. For more information on, or to register for, the AGM, keep reading this newsletter for the agenda or go to: http://www.poga.ca/20th-poga-agm.

#### **POGA 2017 Growers Manual**

#### **Bedtime Reading?**

In the March, 2017 issue of The Oat Scoop, Jim published an appeal to oat growers for thoughts, ideas, wishes and secrets "to growing the best oat crop ever." Any growers who responded to Jim's request for input can hold their heads high, as the information may well have contributed to the revised and updated POGA Online Grower Manual. Jim adds, "However, it is never too late for producers to email or call me." Environmental and business conditions are always evolving and this valuable producers' online tool needs to be reviewed and revamped periodically to keep up with those changes. This is the reason POGA contracted Jim in 2016 to take on the project, with the support of the Government of Saskatchewan's Industry Organization Development Fund (IODF), and the finished product was published to the POGA website in August, 2017.

While working on the task, Jim reviewed the previous on-line growers manual, as well as the full 2010 Prairie Oat Growers Manual (created by a team from the University of Alberta (U of A) and it is still available for download on the POGA website). "The 2010 U of A manual was well written and can still be used as a valuable tool. However, conditions are always changing and relevant research and development resource materials are created each year. I reviewed the previous on-line POGA manual and expanded it, adding several new chapters and current reference resources," explains Jim.

"As an example of ever-changing conditions, over the last 30-40 years we have experienced a 2-week increase in frost-free days. This alone has likely added to disease and pest stressors for crops." Changes such as this wouldn't necessarily be required each year in the manual, however: "A quick annual review of these types of manuals may be all that's needed to keep things up to date and relevant."

The manual can be used at all production stages, including initial planning well before varieties are chosen and the equipment hits the field. It will be especially useful for growers who may not have oat-

growing experience or for those coming back to the crop after a few years out of the oat production arena.

Several of the chapters deal with historical views of the topics of oats, climate and other factors. Jim feels that looking back is an important component for looking ahead and planning for the future. "It's valuable to see what people were thinking and the predictions being made in the past. It tells us a lot about how we arrived at the place we are at now and that can help us make plans and predictions for the future."

Jim's final thoughts: "Farmers already know how to grow oats - they prove that every year. A tool like this might not be needed all the time, but it is a valuable resource when questions and problems arise."

#### **Winter Oats Varieties**

#### There's No Outdoor Thermostat in Canada!

There is no way to turn up the heat in Canada, so oat growers have to find other ways to work around the cold and try to turn the Canadian cold to their advantage. During a POGA meeting at Jim's farm a few years back, talk turned to cold-tolerant oats. So Jim started working on developing oat varieties that are more cold-tolerant no matter when they are planted. Aside from simply extending the growing period, this type of variety could be used to, "beat heat, diseases and pests by strategically-planned seeding times."

The work is still in the early testing stages. Next spring, Jim hopes to conduct extremely early seeding with more experimental, potentially cold-tolerant oat lines alongside comparison crops such as wheat and barley.

Jim is still working with Dr. David Livingston, U.S. Dept. of Agriculture, Agricultural Research Service, North Carolina, to evaluate winter oat lines (as reported in the August, 2016 Oat Scoop). Jim has received seed in the mail from Dr. Livingston and he will have planted them by the time you read this newsletter. Says Jim, "It is a bit late to be receiving and planting seeds here, but we have to remember that it's not late at all in North Carolina!"



#### Other New Oat Varieties

#### The Term 'Less is More' Does Not Apply Here!

The major focus for Oat Advantage is, of course, breeding better milling oat varieties. "It all starts with hand-pollination of varieties that display promising characteristics. It's labour-intensive work and it takes 10 to 12 years to get a variety into the market and farmers' fields," says Jim. He has developed two new varieties to be released through SeCan, which are being grown by a number of oat growers in Manitoba, Saskatchewan and Alberta. Jim visited many of these farmers during harvest to talk face-to-face and hear about their challenges, needs and successes.

Jim explains, "Aside from future royalty income from developed varieties (which can take a long time to

come to fruition), I receive helpful financial support for research and trial projects (oats and other grains) from organizations such as SeCan, POGA, and Richardson International. About a third of what we need to run the research program comes from the research support of these three organizations." Jim's short-term goal is to create at least two successful oat varieties in order to collect sustainable royalties. His long-term goal is to focus on oat research exclusively.

The main trick for a grain breeder is to ensure that all players are happy with a variety. A line of oats may have phenomenal growth in the field but if those oats don't provide the traits that the buyers, processors and consumers are looking for, there is no reason to grow it. So, there are many factors to take into account while developing and evaluating varieties for success in the market.

Breeding successful varieties includes subjecting them to as many negative conditions as possible in order to determine how they will hold up under any condition that nature might throw at them. If necessary, Jim attempts to simulate conditions if they aren't presenting themselves naturally. "For instance, I am not harvesting some of the trial oats right now (as of interview time) in order to see which oat lines show themselves strong enough to stand up to late-harvest

conditions. I have 240 'mini' oat family blocks (10,000 plants) in a particular population, for instance. If any of them fall, or the stems break,



I won't accept those plants for future trials. Once the best oat lines pass all of these types of tests, then it's on to testing for grain quality and milling company standards." In order to fully understand their processes and needs, Jim toured a milling plant in Portage la Prairie, Manitoba, as part of a tour with other oat breeders courtesy of Richardson Milling.

Other types of breeding projects include developing plants that produce fuller, more productive, multibranched panicles, and Jim hand-picked those in September and October for future study. These might hold up better against wind, hail and other stressful conditions, and to date are showing some good potential. Jim has also been working on developing a line of 'itchless oats'. This is a project of interest for Jim and it may take a long time to achieve success. First, all the other characteristics required of a good oat variety must be met before screening for the hairless trait.

One thing is clear: Jim doesn't have a lot of spare time on his hands! Make sure you attend his presentation at the AGM and conference - Jim looks forward to 'talking shop,' answering questions, and getting the many different perspectives of growers, millers, handlers and shippers while at the POGA AGM!

### **Crop Sequencing**

#### Where DID I Put That Crop... Last Year?

QUESTION: What do wheat, oat, canola, pea, canaryseed, hemp, quinoa and coriander crops all have in common? ANSWER: 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. Bill is a Crop Management Agronomist and he has pulled out all the plot equipment necessary to study these crop sequences. Bill states, "A crop sequence looks at what happens when a crop is grown on the stubble of a previous crop versus a rotation which looks at the long term impact (several years) on a crop like canola when it is grown in a canola - oat rotation or a canola wheat - pea - oat rotation." Little is known about how oats and some of these special crops affect the crop that follows them or vice versa.

Other factors that will be taken into account are environmental conditions - especially precipitation and temperature. "This study will provide us with good information on which crop sequences are robust across a wide range of environmental conditions and which are better adapted to a more limited range of environmental conditions," states Bill. All of the agronomic information collected will provide growers with better ability to plan and manage copy diversity. It could very well help producers keep track of just where to put which crops for maximum return every year.

The project will be conducted at four sites over a fouryear lifespan: Indian Head, Melfort, Saskatoon and Swift Current. Bill is currently completing the second year of data collection. The project investigates the eight crops listed in the tables that follow, which will result in 64 two-year crop sequence combinations. It will provide up to 12 site-years of data and, when all is said and done, 256 plots will take approximately 5 acres of land per site to grow all that data!

What, exactly, will Bill be counting, tracking and measuring? Moisture and residual N at the beginning of the second year; plant density; volunteers during the growing season of the second year (counts and biomass); disease ratings; leaf material sent off to identify primary species; and, of course, grain yield and grain quality.

The first year - 2015 - was spent putting the first crops in the ground. Of course, there were a few hitches. Problems were encountered establishing stubbles at one site the first year, so there will be one less year of data on that site, but stubbles at all sites were successful in 2016. There was lowered yield in one crop due to disease and another crop due to poor germination. However, 2016 data was collected at the three sites that established crops in 2015 and data is being generated for the 2017 season.

You may have heard some of these results in 2016, as May has made presentations at a multitude of events across Saskatchewan, the Prairie Oat Growers Association Annual General Meeting in Hecla, MB, and an interview with Bill resulted in an article in Top Crop Manager (March 24, 2017).

Bill cautions, "I have been reluctant to make very

strong statements about the limited data I have until the second year of data collection has been completed. In the following table from three sites in one year you can see that there is some variation in the effects of the eight stubbles on oat yield."

The effect of crop stubble on oat yield in 2016						
at three locations (kg/ha)						
	Oat					
		Swift	wift			
Stubble	Indian Head		Current		Saskatoon	
Wheat	5584.3	b*	6183.2	С	7872.9	bc
Oat	5160.8	С	5834.8	С	6271.1	d
Canola	5563.8	bc	6046.5	С	8356.3	а
Pea	5729.0	ab	7005.6	а	8318.8	а
Canaryseed	5166.7	С	6276.7	bc	6850.0	d
Hemp	6107.4	а	7031.9	а	7096.1	cd
Quinoa	6021.1	а	6979.6	а	8894.9	а
Coriander	5711.6	ab	6760.4	ab	6478.0	d

The effect of crop stubble on canola yield in 2016						
at three locations (kg/ha)						
	Canola					
	Swift					
Stubble	Indian Head		Current		Saskatoon	
Wheat	1994.6	а	2844.0	ab	3984.5	ab
Oat	2106.3	а	2766.6	ab	4041.4	ab
Canola	1893.6	ab	2624.7	b	3711.9	bc
Pea	2288.4	а	3202.3	а	4952.1	а
Canaryseed	2152.6	а	2758.3	ab	2730.7	cd
Hemp	2137.4	а	3096.1	ab	3379.8	b
Quinoa	2293.2	а	2919.6	ab	3645.5	b
Coriander	1520.6	b	2956.6	ab	1921.1	d

\*NOTE: lower-case letters in a column followed by the same letter are not significantly different according to the least significant difference test ( $P \le 0.05$ ). May explains, "For example, when oat was grown at Indian Head the highest yields were achieved on hemp, quinoa, coriander and pea stubble 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 canaryseeed 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).

May continues, "Canola is a good example of this variation. Canola was among the best stubbles at Saskatoon and the worst at Swift Current and middle of the road at Indian Head. 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 no conclusive results can be determined from only one year of data. There is much more work to be done before broad recommendations are made."

The field work wraps up in year 2018 and in 2019 the project promises a hefty report full of numbers and

facts to read and digest. Contributors to the project are: The Government of Saskatchewan, Saskatchewan Wheat Development Commission, Western Grains Research Foundation (WGRF), Canaryseed Development Commission of Saskatchewan, and POGA. POGA will keep you posted on the 2017 results when they come out.

#### **Leaf Blotch Research Project**

#### **Connecting the Dots**

A certain research team is working to connect the dots to remove spots - well, to be truthful, to remove blotches. According to the University of Wisconsin's Disease Profile, leaf blotch is, "a complex of common fungal diseases of small grains (e.g., wheat, barley, oats and rye), and many grasses. Lately, it is appearing more often in oats than it did in the past, especially in 2014 Saskatchewan oats, and it is vital to learn as much as possible in order to deal with what might become a prevalent problem. Aaron Beattie, Randy Kutcher and Tajinder Grewal of the Crop Development Centre at the University of Saskatchewan, are busy screening and evaluating leaf blotch pathogens, looking at resistance genetics, and developing molecular markers for resistance in oat. The research project, 'Breeding for Resistance to Leaf Blotch Pathogens in Saskatchewan Oat' is supported by Prairie Oat Growers Association and Western Grains Research Foundation (WGRF). This project is also co-funded through the Agriculture Development Fund (ADF) of Saskatchewan and is made possible through the federal/provincial cost-shared Growing Forward 2 initiative. The University of Saskatchewan Phytotron, an enclosed research greenhouse, is being used to conduct this project. The third and final progress report for this project is currently being written. The following is a brief summary from Dr. Beattie, which covers the period November 15, 2015 to November 15,

Over a three-year period (2014-16) field disease surveys conducted in central and northwestern Saskatchewan indicated that leaf blotch was most prevalent in 2014; however, leaf blotch was found in crops in 2015 and 2016. Preliminary observations from the 2016 progress report indicate that higher than average temperatures (versus precipitation amount) may affect the prevalence of one of the pathogen types being studied, while one other type appears to flourish regardless of weather. The third pathogen type did not appear at all in the 2016 field survey. The two main pathogen culprits are Pyrenophora (P.) avenae and Cochliobolus (C.) sativus. The screening of nine oat lines with isolates of these two pathogens, "revealed variability among the isolates to cause disease or not." Some isolates produced reactions in all oat lines being tested, while others had no effect on any of the lines. Beattie states, "Resistance in some oat lines appeared to be much better than in others, but no individual oat line was resistant to all isolates.

The researchers subsequently selected a smaller number of isolates from the two pathogens, "to screen a set of 32 oat lines in order to identify resistant germplasm for breeding, as well as identify parents of currently existing bi-parental populations that could be used for QTL (Quantitative Trait Loci) mapping." Beattie

explains, "QTL mapping is a method used to identify regions of the oat genome (genes) that control, in this case, resistance to leaf blotch."

Some of the oat lines showing resistance to the leaf blotch isolates can be used in breeding programs to incorporate leaf blotch resistance into new oat varieties. Another interim conclusion to date (as of November, 2016 since 2017 data is not yet available) appears significant: "...the resistance is simply inherited in most cases, being controlled by one or two major genes." This is where the molecular markers will step onto the stage. "Development of molecular markers linked to the genes controlling oat leaf blotch resistance will allow breeders to select for resistance at early stages of the breeding process. This will allow more efficient use of disease nurseries which have limitations in terms of the number of lines that can be evaluated," says Beattie.

Results from year three of the project will include evaluation of Western Canadian advanced oat lines and varieties from oat breeding programs. They will be screened with P. avenae and C. sativus isolates, again for pathogen resistance. Dr. Aaron Beattie and team promise a tell-all report and it will probably be ready for the next issue of the Oat Scoop. Hopefully, this research project will be a good step forward to remove those yield and quality-reducing blotches from your oat leaves.

## Oats and Dairy Research Project

#### Please Pass the Milk (from Oat-Fed Cows)

POGA has entered into an agreement with the University of Saskatchewan to support their research project entitled, "Develop New Strategies to Efficiently Utilize Oat Grains in High Production Dairy Cows to Maximum Economic Return and Benefit to Prairie Oat Growers," - led by Dr. Peiqiang Yu, Principal Investigator, Professor and Ministry of Agriculture Strategic Research Chair in Feed R&D. The project has been co-funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) for Collaborative Research and Development Funding (CRD). The project began in September, 2017 and ends in August, 2023.

Research will focus on developing new strategies to determine the highest Feed Milk Value (FMV) oat varieties for high production dairy cow feed, to determine strategies for feed processing applications to achieve the highest FMV in oats, and to determine the best oat feeding strategies to achieve the highest FMV for dairy cows. The last strategy in this list will look at the potential to replace a certain percentage of barley with oats in current standard feed blends and increase the FMV.

In his proposal, Dr. Yu states, "the research program will give better insight into the mechanisms of oats to improve digestive behavior, improve utilization efficiency, reduce costly incidents of bloat and acidosis, and assist the dairy industry by developing low-cost feeding strategies utilizing alternative feed resource of oat grain. It is anticipated that the proposed research program has tremendous potential that can highly influence and benefit both the dairy and oat industries in western Canada."

This project will look at what can be achieved by incorporating more oats into dairy cattle rations.

# Oats and Horses Research Project

#### Reined In and Stabled

Dr. Burt Staniar, Department of Animal Science, Pennsylvania State University, and his graduate students, Ms. Siga Lapinskas and Ms. Patricia Ochonski, have concluded their research project, "Oats Improve the Gastrointestinal Health of Horses."

The results for each of the four established objectives of the project did not produce, in themselves, conclusive findings but there were some positive indications noted by Dr. Staniar. What follows are the objectives of the study and the results from Dr. Staniar's team:

Objective 1) Directly evaluate the gastrointestinal permeability (i.e., leakiness) with sugar marker tests. Permeability was highest in the horses fed the pelleted diet that contained the smallest particle size. The treatment diets that contained whole oats moderated this increased permeability and no difference was detected between whole-oat-containing diets and the hay-only diet.

Objective 2) Characterize and quantify gastric ulceration. In this study, horses fed the hay-only diet had the lowest quantity of ulcers. While statistically significant differences were not detected, it appears that whole oats may reduce the risk of ulcers in horses.

Objective 3) Measure indicators of systemic inflammation associated with increased gut permeability. No differences in systemic markers of inflammation were detected in this study. Dr. Staniar states, "There are a number of reasons why we may have been unable to detect any treatment differences. First, it may be that the dietary treatments have no effect on gastrointestinal inflammation. Second, localized inflammation at the level of the gastrointestinal tract may have been undetectable when examined at a systemic concentration. Third, the timing of sample collection may not have been appropriate to detect changes that were occurring."

Objective 4) Quantify other markers associated with hypothesized changes, including feed and fecal particle size, and fecal pH. "While relatively simple to measure, these response variables were one of the unique characteristics of this study. Our original hypothesis was built around a concept of dietary, physically-effective fiber, a concept that is well established in dairy nutrition. We demonstrated an ability to formulate diets that have clear differences in feed particle size. Further, these differences are associated with changes in fecal particle size and fecal pH. These last two characteristics theoretically influence qastrointestinal health," notes Dr. Staniar.

Dr. Staniar offers the following conclusion: "Taken together, the findings of this research on whole oat incorporation into the equine diet support the hypothesis that a diet with a high concentration of NSC [non-structural carbohydrates] (>35%), small particle size, and no oats may result in gastrointestinal leakiness, and that inclusion of whole oats may nullify or moderate this leakiness and the associated changes in other response variables."

Dr. Staniar also provides the following information to explain some of the points he finds relevant as a result of this study: "Horses fed diets that included whole oats had less acidic fecal pH, which may be indicative of beneficial changes throughout the gastrointestinal tract. The data on dietary and fecal particle size indicate that inclusion of whole oats resulted in larger particles traveling through the gastrointestinal tract. Horses evolved consuming long fibrous grasses on the plains of North America. Their gastrointestinal tract is well adapted to digesting and absorbing energy and nutrients from this long fiber source. The athletic horse of today often requires the additional energy found in whole oats or other concentrates, but oats are unique in that they provide a significant long-fiber component in the hull along with an energy-rich groat. This means that oats fit well with the form and function of the equine gastrointestinal tract. There is one clear piece of evidence: the inclusion of oats resulted in a higher, less acidic pH. This may reduce the risk of damage to the GI tract due to acidosis."



Dr. Staniar concludes by saying, "The data from this study does not provide conclusive evidence that inclusion of whole oats will benefit the health and performance of horses. That being said, rarely does any one study provide this kind of evidence. However, I am confident in saying that there are pieces of evidence and indications that whole oats may have benefits that we've not previously explored."

This project was partially funded by Western Grains Research Foundation (WGRF) and Prairie Oat Growers Association. POGA thanks Dr. Staniar and his research team for the project work.

#### **RUSSIAN PROVERB:**

It's not the horse that draws the cart, but the oats.

# How to bring more Canadian Oats to Mexico?

#### The Mission continues!

POGA's efforts in the Mexican market continue to be tireless and successful. Not only are Mexican imports of Canadian oats at the highest they have ever been, but the online campaign also continues to gather more followers. More than 1,950 people visit the website each day, while on Facebook we are reaching over 2 million people each month, including our more than 160,000 fans. In addition to POGA's activities in the digital world, in June POGA took a small delegation for a Trade Mission to Mexico City and Guadalajara to meet with relevant players in the country.

"There are strong relationships with the major Mexican buyers," explains Art Enns, President of POGA. Having led the missions for several years, he has seen the consolidation in the Mexican market and also the growth. "We are very happy to see leading companies like Grupo Vida and Almacenes Vaca take such a collaborative and progressive approach to getting healthy oats into the diets of Mexicans."

"We are told that Mexican demand for oats will rise at least 30% in the coming year," says Shawna Mathieson, Executive Director of POGA. "It was exciting to see some of the new facilities. We are very grateful to Agriculture and Agri-Food Canada for the agri-marketing support they have provided. By combining this support with matching funds from POGA, we have exceeded our targets for developing a more stable, larger share of the Mexican market."

The Mission also included a meeting with the agri-food team of the Embassy of Canada in Mexico City and Guadalajara, which has been working with POGA since 2012. In order to reduce the number of rejections of Canadian products at the border, the Mexican Agency for National Health Service, Food Safety and Food Quality (SENASICA) of the SAGARPA (Mexico's Ministry of Agriculture) has put in place a program that allows the inspection of Canadian imports to be inspected inside the Mexican territory at in-land rail terminals, instead of at the border. These include: Pantaco (Mexico City), Puerta Mexico (Toluca), Silao, Guanajuato and Hidalgo. When the program was piloted in 2016, only 22 products were included in the list of eligible products. This list increased in May to 34 products, including rolled oats and worked oats. According to the requirements of the program, shipments must be comprised of containers of approved products entering Mexico via rail in order to participate.

Robynne Anderson of Emerging ag co-ordinated the mission and will be organizing a second mission later this year to do more consumer outreach. "In the face of the terrible destruction following successive earthquakes, our hearts and minds are with the people of Mexico. We wish them a rapid recovery and mourn the lost lives. POGA has expressed its empathy online and in other activities and will pace its efforts with

those of Mexicans while they rebuild."

04021001

This project is co-funded with the AgriMarketing Program under Growing Forward 2, a federal, provincial, territorial initiative.

Non-fat dry milk

The current list of eligible products for SENASICA's program allowing inspections at in-land rail terminals (instead of at the border) when shipped in intermodal rail containers now includes processed oats, as of May 2017:

04021001	Non-rat dry milk
04022101	Whole milk powder
04022101	Cream powder
04041001	Whey powder, with protein content less than or equal to 12.5%.
04041099	Whey (not in powder)
04059001	Butterfat
09062001	Ground cinnamon
11010001	Wheat flour
11022001	Corn flour
11029001	Rice flour
11029002	Rye flour
11029099	Other cereal flours
11031301	Corn groats and meal
11041201	Rolled or flaked oats
11041999	Other grains rolled or flaked
11042201	Worked oats (hulled, pearled, sliced or kibbled)
11042301	Broken corn
11042301	Worked corn (hulled, pearled, sliced or kibbled)
11051001	Dehydrated potato flour
11063099	Flour, meal and powder of fruits
11071001	Malt, not roasted
11072001	Malt, roasted
11090001	Wheat gluten, whether or not dried.
12081001	Soy flour
21069099	Cream substitute/non-dairy creamer
23023001	Wheat bran
23033001	Distiller's dried grains
23040001	Cake and other solid waste from the extraction of soybean oil, including "pellets".
23040001	Soy hulls
23091001	Dog or cat food, put up for retail sale.
27030001	Peat-moss
35011001	Casein
25010002	Caralantan

35019002

Caseinates



#### POGA'S 20<sup>th</sup> ANNUAL CONFERENCE

Thursday, December 7, 2017 Banff Springs Hotel, Banff, AB

8:00am Registration and Free Hot Breakfast

8:45am Welcome and Introduction – Art Enns, POGA President 8:50am Greetings from Alberta Agriculture and Forestry (TBC)

9:00am What's Driving North American Agriculture in the Year Ahead? – Mike Pearson, Market to Market host, Writer of Weekly

Journal of Rural America and co-host of Ag News Daily podcast.

10:00am Results from Two Years of Oat Variety trials in Westlock and Falher, AB . . . Spoiler Alert: the best variety was not Morgan

in year one; we'll have to wait and see for year two! - Sandeep Nain, General Manager, Gateway Research Organization

10:30am Coffee Break

11:00am POGA Annual General Meeting – Art Enns, POGA President

11:15am USA Oat Marketing Campaign: What's Happened in the First 6 Months and What's the Future Plan? – Jody Dundas, Partner

and Chief Strategist, Suckerpunch Creative

12:00pm Soup and Sandwich Lunch – Tour the Sponsor's Displays

1:00pm Oat Market Outlook – Randy Strychar, President, Oatinformation.com

2:00pm Ways the University of Alberta is developing oats for end uses and utilizing the total oat to get more value for them -

Dr. Lingyun Chen, Ph.D., Professor, University of Alberta

2:45pm The Updated POGA Grower Manual, How it Can Help Producers and Breeding Results from Oat Advantage – Jim Dyck,

Owner and Private Oat Breeder, Oat Advantage

3:15pm Coffee Break

3:45pm **Keynote #2** –TBC

4:45pm Wrap-up and Adjourn –Art Enns, POGA President

5:45pm Social Hour at the Banff Springs Hotel

6:30pm Dinner and Speaker: What Makes Consumers Tick – Carman Allison, VP of Consumer Insights, Nielsen (Additional Cost: \$50)

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 Dec. 6, there will be a meet and greet beginning at 8pm in Mount Stephen Hall of the Banff Springs Hotel

#### Mediterranean Stuffed Mushrooms

PREP TIME 15 mins COOKING TIME 25 mins TOTAL TIME 40 mins

SERVES 8

CATEGORY: Appetizers, Gluten-free, Vegetarian

Crimini mushrooms are stuffed with bold Mediterranean flavors and heart-healthy oats. This appetizer is as easy as it is impressive.

#### **INGREDIENTS**

1 Tbsp olive oil (15 ml)

1/2 small red onion, finely diced

1 clove garlic, finely chopped

3 big handfuls baby spinach, chopped

1/4 cup oil-packed sun-dried tomatoes, finely chopped (60 ml)

1/4 cup pine nuts, lightly toasted (60 ml)

1/2 tsp dried oregano (2.5 ml)

1 Tbsp balsamic vinegar (15 ml)

1/2 tsp salt (2.5 ml)

pinch freshly ground black pepper

1/2 cup quick oats (125 ml)

1/2 cup grated or shredded parmesan cheese (125 ml)

1/4 cup flat-leaf parsley, finely chopped (optional) (60ml)

16 med-large crimini or white mushrooms (1 - 2" in diameter)



Book your hotel room today! (must be booked by Nov

14)! Go to

www.poga.ca or call 866-540-4406.

Mention Code

2017POGA

#### **INSTRUCTIONS**

- Prepare mushrooms by snapping off stems and removing gills with a teaspoon, being careful not to break mushroom. Roughly chop stems and reserve for filling.
- Place mushrooms on a baking sheet, cavity side up, covered with a damp paper towel until ready to use.
- In a large non-stick skillet, sauté onion until soft. Add garlic and continue to sauté for 30 seconds, or until fragrant.
- Add chopped mushroom stems and a pinch of salt. Cook until tender.
- Add spinach and sauté until wilted. Stir in tomatoes, pine nuts, oregano, balsamic vinegar and pepper (to taste.)
- Stir in oats, remove from heat and let stand for 5 minutes before stuffing mushrooms.
- Stuff mushroom caps with 1 heaping tablespoon of the filling. Sprinkle each with parmesan cheese.
- 8. Bake at 375° F (190° C) for approximately 12-15 minutes, or until cheese is golden and mushrooms are tender. Transfer to a serving plate and sprinkle with parsley.







#### **The Manitoba Oat Growers** Association (MOGA)

#### **Date**

Wednesday, February 14, 2018, 2:40pm

#### Location

Victoria Inn Hotel and Convention Centre 1808 Wellington Ave Winnipeg, MB R3H 0G3 (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\*

2:40pm	Welcome from MOGA President, Ray Mazinke
2:45pm	MOGA Annual Business Meeting, Ray Mazinke

Note: There will be a vote on a change of the MOGA by-laws. The new draft by-laws are available at www.poga.ca under the MOGA

AGM

Playing David in a Goliath Marketplace; how 2:55pm

GORP has evolved from making granola bars in a basement to setting up a warehouse with staff, while using Canadian oats! Colleen Dyck, Founder & Owner of GORP Clean Energy Bars

3:20pm Adjourn

> \*Times and agenda topics subject to change. Check poga.ca for updates

# CropConnect Conference

#### SaskOats Annual General Meeting

#### Date

Tuesday, January 9, 2018, 11:30am

#### Location

**TCU Place** 35 22 St E

Saskatoon, SK S7K 0C8 (as part of CropSphere)

Free admission to the AGM

#### Agenda\*

11:30am Opening remarks from SODC chairman, Alan

Butuk

11:35am SODC Annual Business Meeting, Alan Butuk of

Insinger, Chair

George Barreras, Owner of Oatdeal: 11:50 am

> Processing Oat Drinks in Saskatchewan; How this Growing Market is Different from

other Beverages on the Market.

12:15 pm Adjourn

\* Times and agenda topics subject to change. Check poga.ca for updates



## Interested in the LATEST INFORMATION for Growing Oats?

POGA contracted Jim Dyck, breeder at Oat Advantage in Saskatoon, to compile the latest information on everything from variety selection, field selection and seeding, fertility, weed management, disease management, insect management, harvest management and special production. Check it out at http://poga.ca/grower-manual



## Alberta Oat Growers Commission Annual General Meeting Monday, January 29, 2018

(Monday before FarmTech 2018)

#### Location

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

#### Agenda\*

6:30pm 7:00pm	Complementary drink plus a light meal Welcome from the Alberta Oat Growers Commission
7:05pm	<b>AOGC Business meeting;</b> Brad Boettger, Chairman from Tofield, AB
7:15pm	Director Elections/Director Acclamation
7:30pm	Sandeep Nain, General Manager, Gateway Research Organization – Results from two years of oat variety trials in Westlock and Falherspoiler alert: the best variety was not Morgan in year one; see the results from year one and two!
7:50pm	Dr. Lingyun Chen, Ph.D., Professor, University of Alberta (U of A) – Ways the U of A is developing oats for end uses and utilizing the total oat to get more value for them

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

and seeded acres for 2018?

Adjourn

Chris Newbergher, Buyer, Providence

**Grain Solutions -** Oat Markets: What can Alberta farmers expect in terms of price

8:25pm

8:45pm

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

\*Times and agenda topics subject to change. Check poga.ca for updates



# Alberta Oat Growers Commission Director Nominations Open

Are you a registered producer\* and interested in becoming a director or do you know someone who is? Here are just a few of the benefits:

- Identify and direct research for the benefit of the entire industry;
- o Increased industry knowledge;
- The opportunity to meet a large number of influential millers, buyers, and government officials across the province, nation and globally;
- Increased information sharing with other growers;
- o Professional development;
- Reimbursement for all travel, honorariums for time spent on the commissions' projects and committees.

\*A registered producer means any producer who has had an Alberta Oat Growers Commission service fee deducted since August 1, 2015

# Deadline for nominations is Wednesday, December 13, 2017

For nomination forms and further information contact:
AOGC Administration Office
PO Box 20106, Regina, SK, S4P 4J7
Telephone (306) 530-8545
Fax (306) 546-2999; Email info@poga.ca

# Estate of Morris Sebulsky - Distribution of Funding

# Reports from the four AgriArm sites that received funding

In 2016 SaskOats was honored to accept money from the Estate of Morris Sebulsky. The board of directors decided to put this money to use quickly by asking four local AgriArm locations what equipment was needed to be more efficient and conduct more oat research. While the lists were long, they were quickly narrowed down and here's what each location purchased:

# **East Central Research Foundation (ECRF)** (report submitted by Michael Hall, ECRF)

The East Central Research Foundation was very pleased to receive a contribution from the estate of the late Morris Sebulsky, which was allocated and distributed by SaskOats. This money was used towards the purchase of new research plot drill. ECRF had been using a prototype SeedHawk drill since 1996. This drill was quite worn with badly rusted parts and hydraulic issues. ECRF was getting by with this seeder but with many breakdowns and repairs needed. This past season the hitch to the drill had to be welded twice which only assured ECRF that using the money SaskOats allocated for a new drill was the right decision.



The new drill is a SeedMaster with variable rate capability. Variable rate technology is of interest to producers and ECRF may follow this line of research in the future. ECRF is still working out some kinks with the seeder but hope to be in good shape for next year and will continue to do research to serve Oat growers. ECRF was part of Bill May's (Research Scientist, Agriculture Canada, Indian Head) oat test weight study which was completed last year. This year the research site has been looking at management factors to facilitate the harvest management of oats. This trial was developed in response to Grain Millers not accepting oats sprayed with pre-harvest glyphosate. The loss of pre-harvest glyphosate as a harvest management option for milling oats has created some challenges. Looking forward, ECRF is part of an ADF proposal which, if approved, will evaluate the effect of fungicide, seeding rate and oat variety on disease development.

ECRF is based out of Yorkton and has partnered with Parkland College since 2013 to conduct field crop research.



ECRF Seed Drill and Summer Students

# **South East Research Farm (SERF)** (report submitted by Lana Shaw, SERF)



SERF purchased an Eliminator seed cleaner. According to Shaw, "The Eliminator seed cleaner has been set up in the seed shed and put to use cleaning samples. It is much better for larger trial samples and we are getting used to using it. It will allow us to clean more than one trial at a time, more than doubling our cleaning speed."

# NorthEast Agricultural Research Foundation (NARF)

(report submitted by Jessica Pratchler, NARF)

"The donation made by SaskOats (through the Estate of Morris Sebulsky) of money for a side-by-side, tractor, and trailer was outstanding and a huge relief for our organization," states Pratchler.

Prior to receiving the tractor, NARF had one open-cab tractor for seeding, spraying, mowing, and tillage. NARF has been expanding quickly over the last three years. Having only one tractor slowed down the operations as they had to connect and disconnect equipment multiple times daily. This made quick tasks

a struggle and often things went undone. With the addition of this closed cab tractor, NARF can spray with a three-point hitch sprayer, which reduces the work load of the other tractor and ensures that spraying is



completed at the correct time. The tractor also allows for the addition of GPS, making pre-burn applications easier and ensuring herbicide has been applied everywhere.

Prior to receiving the side-by-side, NARF had two vehicles. One vehicle has a slip tank on it, which prevents the full use of the box for daily functions. The NARF work



crew is big enough to split into smaller working groups, so the addition of the side-by-side has allowed them to split up into multiple crews that can bring samples quickly in and out of the field. It also allows them to efficiently check crop staging and collect harvest samples. Furthermore, it allows the team to complete work and/or crop check when it is too wet for a large vehicle.

The trailer has also allowed them to travel with equipment. This year, they assisted the Conservation Learning Center in Prince Albert with seeding. This trailer will help move equipment more easily, which

not only assists others but also helps NARF locate more suitable land for trials that would be too far away to drive to with the equipment. This will better accommodate the needs of growers throughout the North-East.



The trailer also allows them to attach bleachers and provide transportation of field day participants without having to completely rely on Agriculture and Agri-Food Canada.



NARF Oat Trials

Pratchler says, "Overall, this donation has allowed us to more effectively manage and collect all the data required in all our field trials. It will also allow us to conduct more oat-production-related trials in the future to accommodate the needs of growers in NE

Saskatchewan."

#### **Indian Head Agricultural Research Foundation** (IHARF)

(report submitted by Danny Petty, IHARF)

3pt Hitch Mower

Historically, IHARF has been sharing a mower with AAFC, and as both organizations' programs grow, it was getting more and more difficult to share that equipment and have it available when needed. Having their own mower allows



IHARF to perform treatment operations, as they mowout entire full-grown plots, depending on what is being tested. It also allows them to maintain trial sites in a timely manner: over 2,200 plots (53 acres) spread across five trial sites in 2017.



#### Side x Side UTV

Having the UTV is crucial for IHARF staff to be able to reach trial sites when field conditions don't allow trucks to enter the fields; this could be during seeding when trying to minimize compaction on the site or

the spring, the UTV allows IHARF to prepare (flagging, staking, and treatment applications) for the upcoming season despite the soft/wet conditions and allows the team to make treatment applications and/ or collect data at the



correct crop stage during the growing season.

Air Delivery System (blower unit & piping to bins)

The air delivery system is important for continued research at IHARF according to Petty.

"After harvest, the fall and winter months are spent processing all of our harvested grain samples. Only two years ago, we were using a one-compartment



wagon to store all of our processed grain samples, creating a logistical headache of what to do with the grain when switching from crop type to crop type. We've since been able to build appropriate storage bins, and thanks to SaskOats and the Estate of Morris Sebulsky, we can now fill the bins with ease during our processing. Depending on the year, we can test over 10 different types of crops; the air delivery system greatly increases our processing efficiency and ability to switch between crops in order to meet report/data delivery deadlines set out by our project funders. The system can also be used by our staff as a dust-collection system inside our processing building, keeping our in-door work environment as clean and dust-free as possible."



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