



THE Oat SCOOP

AUGUST 2015

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Changing Face of Agriculture

Not only did the Saskatoon skyline change, so did the face of agriculture in western Canada. The Parrish and Heimbecker mill, which stood for 105 years before its closure in 2014 came tumbling down June 20 as part of the demolition process initiated in March and its expected completion in August.

The elevator and grain mill, built in 1910 by Saskatoon Milling Company was at one time the largest milling and storage facility on the prairies. The facility was purchased by Parrish and Heimbecker in 1973.

Our thanks to Dave McKercher, Regional Construction Coordinator, for these photos and commentary.

“These photos are of the demolition of the portion of the Saskatoon Q Elevator complex where the original steeping bins for oats were. This gives a good view of the interior where the steeping bins were themselves, plus an idea of how many floors were in that portion of the plant. It is interesting to note that steeping barrels themselves were only held together with banding and cables, not nails or bolts and were over 30ft high. The one photo shows one of the steeping barrels that did a complete flip out of the building during demolition and landed upright, intact. A credit to the workmanship that built it. Usually they would land and collapse like pick up sticks. Incredible workmanship in that part of the plant.”



x

BARBARA PODHORODESKI

Saskatchewan's agricultural industry was saddened by the loss of Barbara Podhorodeski earlier this year (April 26, 2015). Barbara was no stranger to provincial agriculture organizations serving as a director on numerous boards, commissions and associations including Prairie Oat Growers Association. She was also actively involved

in agricultural educational entities such as Agriculture in the Classroom and Soil Conservation. Family and farming were truly her primary passions. She also loved to dance, garden, cook and spend time enjoying the outdoors. She will be missed by the ag community of Saskatchewan.

INVESTIGATION OF AVENANTHRAMIDES A TYPE OF NEW HEALTHY COMPOUNDS IN OATS

The overall objective of this project is to improve the nutritional value of oats through increasing the level of avenanthramides, novel compounds that have strong antioxidant, anti-inflammatory and anti-itching activities.

Oats have been used for personal care since antiquity! The oat bath for instance, provided relief from eczema and burns for people thousands of years ago. The 1930's saw evidence of oats having cleansing action along with the ability to relieve itching and protect the skin. The 90's proved avenanthramides are bioavailable (absorbed by the body). More recent studies indicate that antioxidant and anti-inflammatory actions can be increased with increased consumption of avenanthramides.

Dr. Xiao, will survey the contents of avenanthramides in oat species, cultivars and breeding lines and identify the genes catalyzing the final step of the biosynthesis of avenanthramides. The sequence information of these genes can be used to develop functional DNA markers for oat breeding programs to improve levels of these important bioactive compounds.

This is another example of oat producers working with researchers to create products the marketplace is looking for . . . food ingredients geared to healthier lifestyles! Updates will follow as Dr. Xiao delves further into this research project.

DEVELOPMENT OF IMPROVED OAT CULTIVARS

Jim Dyck M.Sc.,P.Ag. Oat Advantage

When one thinks about an oat breeding program or any cereal breeding initiative, grain quality, grain yield, lodging resistance and disease resistance are top objectives. For Jim Dyck, independent oat breeder, some of the smaller, or more obscure ideas also score highly on the desired list of goals. Reducing trichomes for instance, the oat hairs that contribute to significant dust and itchiness in oats, is an important health consideration. Reducing the amount of these hairs should enhance comfort, safety and efficiency, for both people and equipment. Dyck's program utilizes traditional crossing and breeding methods, evaluation of lines and the introduction of new genetics, and collaboration, that he feels will improve oats.

Oat Advantage began as a simple, hands on oat breeding program. Dyck also counts on his family to assist with the seeding operation

and other activities required to advance the breeding efforts. This family partnership allows all members to contribute where time and skill make sense. As well, their new facility is nearing completion and will make possible year round research work, creating program efficiencies.

Dyck had two experimental oat lines, OT6008 and OT6009, advanced to "support for registration" in February of this year. The lines were voted on in the meeting of the Prairie Recommending Committee on Oat and Barley (PRCOB). The PRCOB meets yearly under the umbrella of the Prairie Grain Development Committee (PGDC).

Both potential oat varieties exhibit good yield for oat growers, and grain quality characteristics suitable for the milling industry. As well, lodging resistance is excellent. Seed increases will happen 2016 through 2018 and

both oat products are scheduled for release in 2019 through SeCan. Regarding naming the varieties, Dyck is keeping that to himself for the time being. The support of SeCan from the beginning, and POGA more recently for this program, is much appreciated by the breeder.

With continued support of POGA, Dyck has been working on the hairless oat project mentioned above. Material from Dr. Vern Burrows' (retired) breeding program in Ottawa, and conversations with David Gehl (retired from IHARF), helped Dyck begin the introduction of oat hairlessness into his breeding program. Second generation level oat cross populations of this nature are in the field, that will hopefully provide lines in yield testing within two years. Dyck says "This is important for farmer safety, where dust and hairs are a health risk for farmers. In processing plants, too, dust reduction could provide extra comfort and safety for the handler and the equipment."

Another non "mainstream" aspect of this independent program is examining the potential of winter oats. Dyck has been participating with Dr. Livingston (USDA ARS North Carolina) in northern evaluation of winter oat lines. The concept is to grow winter oats and examine

winter survival in western Canada. Looking for adaptation to the cold directly, or incorporating cold tolerance genes into spring type oats, could be an important factor with spring oats here to enable earlier seeding. Dyck also goes on to explain that agronomy in many forms, is also key to program success.

Oat breeding is a vital component of a successful oat industry. Efforts of institutions like the U of S Crop Development Centre and AAFC Breeding Programs, plus those of private industry, contribute to the sustainability of oats in western Canada. Dyck appreciates the support of producers and industry with his program. "Oats is a great crop with lots of potential, and I hope to continue to make a difference!" he says.



Jim Dyck's new research facilities located at Oat Advantage near Saskatoon

BRANDON WHEAT AND OAT TOUR **Friday July 31, 2015 Brandon Manitoba**

Producers, industry funders, wheat, barley and oat commissions, grain handlers and their clients and area farmers were invited to attend the tour. This event provided opportunities for the wheat and oat breeding programs to showcase their work and their expertise. Dr. Mitchell Fetch, Ph.D, Research Scientist, AAFC, one of the tour organizers noted "Of particular interest to producers is the equipment utilized in the research plots. Although miniature in size, the equipment operates with a GPS tracking system similar to farm operations." Tour participants visited the nursery where very advanced lines (just before breeder seed) were examined. Breeders explained their process of selection and how plants not like the rest are discarded. Uniformity is essential to varietal development.

At the irrigated disease nurseries, participants examined oat lines had been subjected to crown and stem rust, and smut. "Disease pressure, this year, is wonderful (i.e. high) reported Dr. Mitchell Fetch, which is only good news to the research pathologists. The linear irrigation has worked well this year and disease

pressure is high particularly for fusarium and rust. She went on to say "Crops in areas of high moisture and dew will exhibit this type of disease pressure, while further west like parts of Saskatchewan may not see the disease due less rainfall this season.

From there, the tour showcased cooperative registration and provincial trials, where some lines were in their second year of testing while others in the first year. OT2101 exhibits average yield, height and lodging resistance; early heading and maturity; significantly above average thousand kernel weight; resistant to smut; trace crown rust last year. OT2102 has average yield; tall and poorer lodging resistance; above average protein; resistant to smut; moderately acceptable to crown rust. OT2105 is average basically across all test points is resistant to smut and moderately resistant to crown rust.

The day proved successful as evidenced by the number of questions, discussions and participation during the tour and at the hearty lunch.

July 29, CDC Tour, Saskatoon

Each summer, oat industry end users, seed companies, grain millers as well as producers are able to get together and talk about oats while touring the plots in and around Saskatoon. For CDC barley/oat breeder Aaron Beattie, the conversations and feedback at events like this, create cohesion within the industry. At the time of writing, Beattie suggested that the plots

“were looking better than expected” with rainfall accumulations of 11/2-2 inches for the year to date. “On the positive side, there is virtually no disease, which is usually an important discussion and demonstration tool of the day” he said. Shortly after this discussion Saskatoon experienced heavy rains and the CDC tour was, regrettably, cancelled.

Alberta Crop Tour



POGA members enjoyed a tour of the University of Alberta oats program with Dr. Linda Hall. The Alberta Oat Growers Commission, in collaboration with Syngenta and Alberta Crop Industry Development Fund (ACIDF) support the project titled "Optimizing Oat Yield, Quality and Stand-ability in Central Alberta."



Director Nominations Open

Are you interested in becoming a director or do you know someone who is? Here's just a few of the benefits:

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

Deadline for nominations is:

WEDNESDAY, OCTOBER 7, 2015, 5PM MT

For nomination forms and further information contact:

MOGA Administration Office

PO Box 20106, Regina, SK S4P 4J7

Telephone (306) 530-8545; Fax (306) 546-2999;

Email info@poga.ca



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Deadline for nominations is:

THURSDAY, OCTOBER 15, 2015 5PM MT

For nomination forms and further information contact:

SODC Administration Office

PO Box 20106, Regina, SK S4P 4J7

Telephone (306) 530-8545; Fax (306) 546-2999

Email info@poga.ca

MRE-Findings of the Crops Logistics Working Group III

Between March and May of this year the Crops Logistics Working Group III was tasked to examine the issue of the Maximum Revenue Entitlement (MRE) provision contained within the Canada Transportation Act (section 150-151). Many producers will know MRE as the "revenue cap," or a limit on the average rate that CN and CP railways can charge. To clarify, there is no cap on the amount of grain they can move and the railways have the flexibility to set differential rates for moving western grain as long as the total revenue they earn does not exceed the entitlement determined by the Canadian Transportation Agency (CTA). The year over year inflationary change in the rate is also calculated by the CTA. (Source: Quorum Corporation: A Review of the Maximum Revenue Entitlement)

The task of this working group is twofold: reviewing the MRE as a policy statement, and a discussion of a "costing review". Art Enns, POGA President, participated with ten other individuals from Industry and government. The Report of Findings by this working group is posted on POGA's website, www.poga.ca.

What is the crop looking like across the Prairies?

To provide a snapshot we checked out the provinces' crop reports.

Alberta:

Oat Crop growing conditions
as of **July 21, 2015:**

Southern Region: 41 - 49% good to excellent

Central Region: 19 - 22% is good to excellent

North East Region: 37 - 49% good to excellent

North West Region: 13 - 18% good to excellent

Peace River Region: 17 - 27% good to excellent

Across the province of Alberta growing conditions are rated 27% poor; 43% fair; 29% good and 1% excellent.

Alberta Agriculture and Forestry, Economics and Competitiveness Division, Statistics and Data Development Branch.

The 2015 Alberta crop reporting series is available on the internet at: [http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/sdd4191](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/sdd4191)

Saskatchewan:

Oat Crop growing condition as of **July 27:**

South East: 11% excellent; 64% good; 22% fair; 3% poor.

South West: 37% good; 49% fair; 14% poor.

East Central: 8% excellent; 70% good; 20% fair; 2% poor.

West Central: 1% excellent; 32% good; 55% fair; 9% poor; 3% very poor

North East: 15% excellent; 72% good; 22% fair, 1% poor.

North West: 8% excellent; 47% good; 37% fair; 8% poor.

Saskatchewan Agriculture Crop Report:
<http://www.agriculture.gov.sk.ca/cr150730>

Manitoba:

Generally speaking, the south west and central regions of Manitoba report good crops; the north west crops are good to fair, while the eastern region reports standing water and drowned out areas. The Interlake region is reporting good with lodging in areas.

<http://www.gov.mb.ca/agriculture/crops/seasonal-reports/crop-report-archive/2015-07-27-crop-rep\s>

CROP UPDATE: On **August 6** Jack Dawes spoke with Randy Strychar, President of Ag Commodity Research, who stated "Crop conditions improved in some areas of Saskatchewan with moisture received these past two weeks. Alberta is still a concern and below average yields are anticipated." Ending stocks are still forecasted in the 450,000 metric tonnes (MT), well below the 700,000MT average. This may prompt higher prices sometime this year.

The US crop is forecasted for above average production and although US millers will use some of this production Strychar is not expecting a lot of displacement of Canadian Oats.

Scandinavian is Canada's largest competitor for oat sales into the US but a smaller crop is expected there due to several factors like late seeding and excessive moisture.

From a grain movement perspective, Strychar predicts a "normal year;" with oil prices down and a smaller crop overall anticipated, there will be less demand for rail cars.

POGA and Riverland Ag will be sponsoring a tour of the new Northgate Commodity Logistics Hub at Northgate Saskatchewan on Wednesday, December 2, 2015. A bus will provide roundtrip transportation from The Temple Garden Mineral Spa in Moose Jaw to Northgate and lunch will be provided. Due to space only 50 people can participate. This event is free. RSVP early by e-mailing info@poga.ca.

POGA'S 18th ANNUAL CONFERENCE



THURSDAY, DECEMBER 3, 2015

Temple Gardens Mineral Spa

24 Fairford St E

Moose Jaw, SK S6H 0C7



Agenda

- 8:00am Registration and free breakfast available – oatmeal, eggs, fruit, bacon, pastries, juice, tea and coffee. Meet our sponsors and enter the draw for \$100 worth of FREE OAT GROCERIES
 - 8:45am Welcome and Introduction – Art Enns, POGA President
 - 8:50am Greetings from the Saskatchewan Agriculture Minister, Honourable Lyle Stewart
 - 9:00am Assessing North America Weather Trends for Now and in the Future
David Phillips, Senior Climatologist, Environment Canada.
 - 10:00am Innovative ways to manage weeds in oats – Chris Willenborg, University of Saskatchewan
 - 10:45am Coffee Break
 - 11:15am Gluten-Free Oats - Update on Health, Safety & Regulatory Issues: What it means for oat producers
Shelley Case, RD, Consulting Dietitian and Author of Gluten-Free Diet:
The Definitive Resource Guide
 - 12:15pm Soup and sandwich lunch – tour the sponsor's displays
 - 1:00 pm Enabling Supply Chains for Oats
Mike Mohan, Assistant Vice President Grain for Canadian National Railway
 - 1:45pm New oat varieties from three of Canada's largest Seed suppliers
Cosmin Badea, Canterra Seeds; Denise Schmidt, FP Genetics; and Brad Pinkerton, SeCan
 - 2:30pm POGA Annual General Meeting; Art Enns, POGA President
 - 2:45pm Coffee Break
 - 3:15pm Opportunities for new Entrants into Western Canadian Grain
Colin Topham, Managing Director, Agrocorp
 - 4:00pm Market Outlook for Oats and Other Crops – Brenda Tjaden Lepp, Farmlink Solutions
 - 4:45pm Wrap-up and Adjourn – Art Enns, POGA President
 - 5:45pm Social Hour at the Temple Gardens Mineral Spa
 - 6:30pm Dinner and speaker: Samantha Stephens owner of OatMeals, the hottest new restaurant in New York City, dedicated to serving oats in a variety of forms as seen in the Wall Street Journal, ABC, NBC, CBS and Women's Health Magazine plus many more! (Additional Cost of \$50)
 - 8:00pm Adjourn
- Daytime seminars, breakfast and lunch \$20.00 Optional Evening Banquet \$50.00

*Times and agenda topics subject to change, for updates, pre-registration and credit card payments visit poga.ca

Note: For those arriving on Wednesday December 2nd, there will be a meet and greet beginning at 8pm at the Temple Gardens Mineral Spa

**Please book your hotel rooms early by calling 1-800-718-7727 and mentioning code 114277.
The discounted rate is only available until mid-November on a limited number of rooms!**

Variety Development

When one looks at any crop breeding program it is evident that breeders continue to advance varieties that benefit producers (yield) and processors (nutritional attributes). Gone are the days when farmers simply marketed what they grew, today one grows for the market, not markets one grows! That being said, producers have a variety of reasons for why they grow the varieties they do . . . disease resistance; maturity; harvest practices; equipment options like grain driers; storage capacity; management practices (weed control, rotations); straw utilization requirements; human or animal consumption markets. Millers and other value added processors, too, often have specific varieties they are interested in for nutritional attributes such as beta glucan content; hull

color; hull content in comparison to groat percentage; and ease of hull removal. Some companies even offer premiums to ensure supply quality and quantity they require.

Bruce Roskens, Grain Millers, summed up the variety discussion by saying "There is no such thing as the perfect variety – only the variety that performs best for the farmer in his management and marketing regime. Also remember – plant diseases mutate every year, end-user needs evolve over time and certainly farmers' cropping options and equipment have changed dramatically in the last several years. Variety selection options should be weighed every year, just as with every crop."

Below is some recent variety trial information from Alberta Agriculture and Rural Development.

OAT												
Variety	Overall Station Years of Testing	Overall Yield	Yield Category ¹ (% CDC Dancer)				Agronomic Characteristics					Tolerance to Smuts ⁶
			Low < 70 (bu/ac)	Medium 70 - 100 (bu/ac)	High 100 - 130 (bu/ac)	V. High > 130 (bu/ac)	Maturity Rating ³	Test Weight (lb/bu)	TSW ⁴ (g)	Height (cm)	Resistance to Lodging ⁵	
MILLING												
Varieties tested in the 2014 trials (Yield and agronomic data only directly comparable to CDC Dancer)												
CDC Dancer (bu/ac)		93	50	84	113	146						
CDC Dancer ² ☼	126	100	100	100	100	100	E	41	37	94	G	R
AAC Justice ▲	18	103	XX	98	110+	XX	M	42	37	97	G	R
CDC Ruffian ▲	28	110+	110	105	116+	XX	M	40	39	94	G	R
Souris ☼	28	110+	120+	103	111	XX	M	41	34	91	VG	R
Previously tested varieties (Yield and agronomic data only directly comparable to CDC Dancer)												
AC Juniper	80	104+	102	104	106+	105+	E	41	38	94	VG	I
AC Morgan	95	111+	110+	110+	111+	115+	M	40	40	92	VG	I
Bradley ☼	31	104+	XX	103	108	106	M	39	39	92	VG	R
CDC Boyer	89	102	103	102	100	105	M	39	42	101	G	MS
CDC Minstrel ☼	61	104+	103	103	105	105+	M	39	38	88	VG	R
CDC Orrin ☼	52	109+	113+	107+	107+	XX	M	41	40	84	G	R
CDC Seabiscuit ☼	30	111+	124	106	108	108	M	39	41	101	G	MR
CDC Weaver ☼	44	104	108+	103	100	100	M	40	43	91	F	R
Derby	79	101	103	102	96-	105	L	41	39	103	G	MS
Jordan ☼	36	112+	112+	109+	117+	XX	VL	38	44	87	G	R
Stride ☼	30	104+	101	102	107	106	M	42	35	104	G	R
Triactor ☼	47	110+	109	108+	114+	110+	M	38	38	89	G	R
FEED												
Previously tested varieties (Yield and agronomic data only directly comparable to CDC Dancer)												
AC Mustang *	108	114+	118+	112+	110+	116+	L	42	37	103	G	I
CDC Nasser	31	116+	132	107	115+	110	L	38	36	98	G	MR
Lu *	58	100	99	98	99	108	VE	41	39	85	G	R
FORAGE												
Varieties tested in the 2014 trials (Yield and agronomic data only directly comparable to CDC Dancer)												
CDC Haymaker	18	104	XX	104	105	XX	L	39	41	109	F	MR
Previously tested varieties (Yield and agronomic data only directly comparable to CDC Dancer)												
CDC Baler *	42	99	96	106	96	XX	L	40	43	99	XX	S
Murphy ☼ *	51	95-	93	96	97	94	M	39	36	108	XX	S

Remarks: Use higher seeding rates for large seeded varieties. New registrations: AAC Justice (OT2084), Bia, CS Camden(OT4001), Nice and CDC Haymaker. Insufficient data to describe: Bia, CS Camden, Nice. ☼ - Protected by Plant Breeders' Rights. ▲ - Plant Breeder's Rights applied for. * Yield figures based on direct and indirect comparisons with CDC Dancer.

¹Yield Test Categories are based on the site means for small plot trials. The defined range for each Yield Test Category is provided in bu/ac. The actual yields (bu/ac) for CDC Dancer are reported in the Overall, Low, Medium, High, and Very High Yield Test Categories. Note that small plot yields may be 10-15% higher than field scale results. ²Yields are reported relative to CDC Dancer. Varieties that are statistically higher (+) or lower (-) yielding than CDC Dancer are indicated. No symbol after the yield figure indicates that there is no statistical difference from CDC Dancer. ³Maturities rated as: VE = Very Early; E = Early; M = Medium; L = Late; VL = Very Late. The long term average maturity for CDC Dancer is 98 days and rated as Early (E). ⁴TSW: Thousand Seed Weight. ⁵Rating categories: VG = Very Good; G = Good; F = Fair; P = Poor; VP = Very Poor. ⁶Disease tolerance ratings: R = Resistant; MR = Moderately Resistant; I = Intermediate; MS = Moderately Susceptible; S = Susceptible. It is advisable that varieties with Intermediate (I) to Susceptible (S) ratings for the smuts be treated with a systemic fungicide.

**Save
the
Dates!**

SODC Annual General Meeting

will be held during CropSphere at TCU Place in Saskatoon
TUESDAY, JANUARY 12, 2016

AOGC Annual General Meeting

will be held at The Edmonton Westin on **MONDAY, JANUARY 25, 2016, 7:15 pm**
(the same week as FarmTech). Drinks and food will be provided beginning at 6:30 pm

MOGA Annual General Meeting

will be held during the CropConnect Conference at the
Victoria Inn Hotel and Conference Centre, Winnipeg, MB - **FEBRUARY 10-11, 2016**
Full agendas will be available on our website, www.poga.ca, this fall.

SODC = Saskatchewan Oat Development Commission AOGC = Alberta Oat Growers Commission MOGA = Manitoba Oat Growers Association

Naber Specialty Grains, Ltd. of Melfort Saskatchewan is in Court Appointed Receivership and therefore producers are encouraged to proceed with caution when using their services. Below is the Producer Advisory published by the Canadian Grain Commission on May 9, 2015.

<http://www.grainscanadagc.ca/index-eng.htm>



Producer advisory

As of May 9, 2015, Naber Specialty Grains Ltd. of Melfort, Saskatchewan is no longer licensed by the Canadian Grain Commission.

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