



**ANNUAL REPORT**

*2023/2024*

## **INTRODUCTION**

This annual report details the 18<sup>th</sup> year of the Saskatchewan Oat Development Commission (SaskOats) operations.

Shawna Mathieson is now in her 14<sup>th</sup> year as the Executive Director of the Prairie Oat Growers Association (POGA), and the Alberta, Saskatchewan, and Manitoba oat commissions. She leads the executive and administrative duties of POGA and the three provincial entities. Since 2023, Kaitlyn Kitzan assists part-time with marketing and communications of the four commissions.

### ***Prairie Oat Growers Association (POGA)***

The Prairie Oat Growers Association (POGA) is a voluntary organization that was established in 1998 to promote the interests of oat growers. POGA is comprised of the Saskatchewan Oat Development Commission (SaskOats), the Alberta Oat Growers Commission (AOGC), and the Manitoba Oat Growers Association (MOGA).

The overall objective of POGA is reflected in the vision and mission statements:

**Vision:** *Increase profitability of growing oats for growers across Western Canada.*

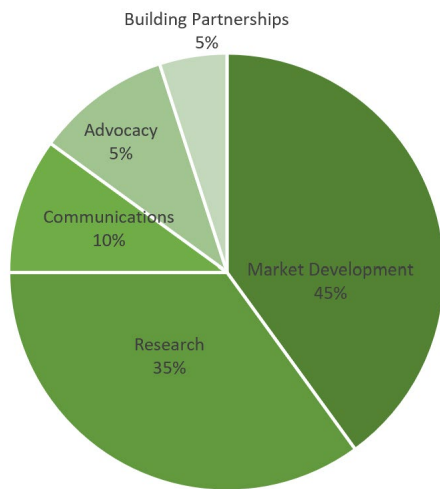
**Mission:** *Optimize oats as a competitive crop and increase grower profitability through the grower supported levy which directs and funds research, helps develop new markets and products for oats, influences policy, and builds partnerships with the oat industry around the world to better serve the Western Canadian oat grower.*

POGA is funded by the three provincial entities with SaskOats being the largest funder, given the majority of oats are produced in Saskatchewan. All three associations collect a 50 cent per tonne check-off from every tonne of oats grown for sale in their respective province. However, at the 2024 AGM of each provincial commission the producers voted to increase the check-off to \$0.75 effective August 1, 2024. In Saskatchewan, this was a unanimous decision; the board and staff greatly appreciate the support of our growers! Each province is governed by a six-member board of directors, and all are board members of POGA.

The Executive Director, guided by the board of directors, manages the administrative and policy duties of the provincial organizations. In addition, through POGA, the Executive Director manages the monitoring of projects that are mutually beneficial to all three entities. Some projects continue to be provincially directed and therefore funded directly from the provincial organizations.

SaskOats directly funds the Crop Development Center (CDC) at the University of Saskatchewan, the Indian Head Ag Research Farm (IHARF), Northeast Agricultural Research Foundation (NARF), East Central Research Foundation (ECRF), Western Applied Research Cooperation (WARC), Ag in the Classroom Saskatchewan, the Saskatchewan Oat Variety trials, as well as some of the projects listed in this report.

All four commissions utilize the same priorities for spending funds, as all commissions work together to promote oats in Western Canada. As such, SaskOats’ goals for expenditures for 2023-2024 were:



### **EDUCATION/AWARENESS**

A key priority of SaskOats is educating youth on the importance and opportunities of agriculture in Saskatchewan. In support of this priority, SaskOats provides an annual commitment of \$15,000 to support Ag in the Classroom (AITC-SK). Through a variety of educational programs and resources, AITC-SK reached over 73,000 students from 658 schools in Saskatchewan.

For the fifth year in a row, SaskOats also provided a “Nutrition Support Bursary”, promoted and administered by AITC-SK. In partnership with Bob’s Red Mill, the bursary supported 17 schools and reached 5507 students from across Saskatchewan. To accommodate as many applicants as possible, funds were distributed across various school divisions, covering both rural and urban areas. In addition to funds, schools were also provided with a nutrition package, access to classroom resources, and recipe cards for students to take home. Each school took their own

approach to incorporate oats into healthy meals and snacks. Overall, the bursary's contribution not only fulfilled immediate nutritional needs but teachers also report it fostered knowledge, excitement, and creativity around healthy eating habits and the versatile uses of oats.

SaskOats also supported AITC-SK's annual Teacher Expedition, which brought teachers from across the province together to tour farms, agri-business and research facilities. The annual event was a three-day action-packed, hands-on tour in the North Battleford area. Each of the tour stops helped motivate teachers while providing them with the tools and knowledge to incorporate agriculture education into their classrooms. Oats was featured at the Western Applied Research Centre (WARC) near Scott. The knowledgeable agronomists leading the tour explained the importance of their work and how they maximize farmers' yields, which in turn leads to more sustainable farming. All of the snacks and meals highlighted products produced right here in our province and oats were featured in a delicious apple crisp dessert and granola breakfast.

In addition, SaskOats proudly supported the development of a new Saskatchewan Grains Display that will travel to agriculture events across the province. The new display will include updated information to share the story of the Saskatchewan agriculture industry's leadership in global sustainability, and how these crops are not only important to our province but also to the world.

SaskOats is also a member of Farm and Food Care Saskatchewan (FFCS), where the commission supported the Canadian Food Focus program this year. Canadian Food Focus (CFF) is a national platform dedicated to connecting Canadians with credible information about food and farming in Canada. SaskOats supported development of two oat related videos featuring Dietitian influencer, Hannah Magee. Hannah explained to consumers through the videos about the different types of oats available in grocery stores and how to prepare a simple oat bar recipe.

Another priority of SaskOats is educating producers and the industry on current oat initiatives, issues, and relevant regulatory changes. To provide the latest oat information and updates, the POGA newsletter, *The Oat Scoop*, is distributed a minimum of twice a year to the membership and to the oat industry. It is available on the POGA website: [www.poga.ca](http://www.poga.ca). This newsletter provides valuable information on oats, research, and issues that impact oat producers.

SaskOats is a member of the Crop Production Week, and holds the SaskOats Annual General Meeting in collaboration with the other Saskatchewan commodity groups in January in Saskatoon.

SaskOats is also a co-host of the POGA annual general meeting (AGM), a day-long event on oat production and marketing held every third year in Saskatchewan. The 2024 Annual General Meeting will be held in Banff, AB and in December 2025 the event will return to Saskatoon, SK.

As a partner of POGA, the SaskOats board of directors have been active ambassadors for the oat milling and processing side of the industry. For the past seventeen years, SaskOats has sponsored the championship oat class at the Harvest Showdown Grain Show in Yorkton – one of the few shows for commercially grown grains.

Other non-research projects that SaskOats contributes to through POGA include:

- *Canadian Agricultural Safety Association “Be Grain Safe” campaign* – has developed mobile units which function as grain entrapment units for demonstrations and as rescue training units for emergency personnel. Awareness efforts are directed at producers and emergency personnel to remind them of proper safety protocols and to effectively handle grain entrapment situations; hopefully saving lives on the farm.
- *Canadian Food Focus* – this website and social media campaign, managed by FFCS, is designed to educate the public on farming and agricultural messaging. It is Canadian focused and includes information from nutritionists and dieticians to connect urban consumers with where their food is comes from.

## **POLICY**

SaskOats strives to maintain an ongoing dialogue with the Saskatchewan government. Therefore, directors regularly meet with the Saskatchewan Minister of Agriculture to discuss current issues related to oat growers. SaskOats met with Minister Marit in November 2023, and hopes to continue engaging in these annual meetings.

In 2021/2022, SaskOats began working collaboratively and strategically with five other crop commissions in Saskatchewan (SaskBarley, SaskCanola, SaskFlax, SaskPulse, and SaskWheat) to advocate on behalf of growers on broad policy issues. Many policy issues are not crop specific so SaskCrops allows for collaboration and efficiencies that would not be found by individual commissions.

SaskOats/POGA met virtually with the Government of Canada in April of 2024 to discuss funding and commission priorities. In addition, POGA continues to work with the Grain Growers of Canada on federal policy issues.

*Grain Growers of Canada (GGC)* – SaskOats/POGA holds a membership GGC, which represents oat growers on many policy issues at the national level. GGC is advancing producer interests on issues including: Ag Canada's fertilizer emissions reduction target, market access, research, transportation, and Business Risk Management programs and solutions. GGC been busy on a few specific files this year including changes to the Capital Gains Tax for farmers, strikes affecting rail and port service, and the Sustainability Ag Strategy (SAS). SaskOats/POGA has representatives on the Sustainability and Transportation committee to ensure oat growers voices are heard on national policy issues.

Building relationships is an integral part of SaskOats/POGA's work, and thus the following important initiatives are supported:

*Crop Logistics Working Group (CLWG)* –The CLWG was established in February 2020 to provide a forum for industry to discuss ongoing issues in the grain handling and transportation system, in the context of the Government's long term transportation agenda.

Specifically, the CLWG will provide agricultural stakeholders a forum to discuss and provide advice and input regarding:

- the future of performance measurement and monitoring of the grain handling and transportation system;
- long-term infrastructure priorities of the grain handling and transportation system; and,
- other short-and long-term transportation issues as required.

The membership established subcommittees to look at supply chain resiliency and data and performance measurement.

*Field Crops Roundtable* – POGA is participating in this Federal Government Roundtable to ensure producer's voices are heard on their goals of:

1. All stakeholders can better navigate the regulatory system
2. Reduced cumulative regulatory burden, unintended consequences, and irritants across the supply chain for stakeholders, and
3. (Create) a regulatory system that reflects the realities of the day and is nimble to opportunities of the future while gaining a better understanding of challenges, disruptors and novel approaches through an increased capacity in foresight and regulatory experimentation."

*NAMA* – POGA directors and the Executive Director have also been active advocates to the oat milling and processing sector by attending and speaking at the North American Millers

Association (NAMA) annual conference each year, for the past 14 years. POGA's strong industry support is demonstrated by invitations to these meetings to provide a producer perspective, and oats continues to be the only commodity group represented at this NAMA event.

*Western Grains Research Foundation (WGRF)* – the oat commissions continue to be represented at WGRF. The commissions see the importance of having representation on this committee to ensure small crops, like oats, continue to have a voice and receive the much-needed research dollars.

*Prairie Grain Development Committee (PGDC)* – the annual meeting where new varieties are either approved or rejected for commercialization. Having producer input into the process, as well as input from the entire oat value chain, helps to maintain high quality new oat varieties.

Barley and other Cereals Sub-Committee- The Canadian Grain Commission created the grain standards advisory committees and included representation from eastern Canada and western Canada. The advisory committees serve their purpose by bringing forward commodity concerns related to the grading system and facilitating input from all grain industry stakeholders in order to provide advice and formulate recommendations to both the eastern and western grain standards committees.

Each advisory committee:

- studies issues about its specific crops
- advises the standards committees about crop-related concerns
- brings forward concerns about the grading system from the point of view of specific crops
- helps to get input from all affected stakeholders

## RESEARCH PROJECTS

All previous and current research projects can be found on the POGA website at <https://poga.ca/research/research-projects/>. Research project results that POGA has approval to share are also listed in the year that the project was completed.



Denotes projects that began in 2023-2024 year



Denotes projects that were completed in 2023-2024 year

### Oat Breeding

**Oat Breeding Research:** AOGC, and all Prairie oat growers, continue to benefit from SaskOats' multi-year commitment with the Crop Development Centre (CDC) in Saskatoon, SK targeted at plant breeding for another 5 years. The objectives are to develop molecular markers for field performance, disease resistance, and end use quality. Further, CDC looks to develop varieties of oat with improved agronomic performance and disease resistance under western Canadian environmental conditions and with superior consumer quality.

*Project Dates: April 2024 – March 2029*

**A 55 lb. bushel high protein oat, with top grain yield, is in your future** by Jim Dyck, Oat Advantage. This private breeding facility has supplied five new oat varieties for the Prairie provinces which contribute to over 200,000 oat acres. This research project is targeting a 10% higher bushel weight, low hull content, high protein, harvest durability, and ultimately high yielding and valued oat varieties. Heavy oats are a focus for Oat Advantage, as the improvement on weight is expected to yield benefits in transportation and storage.


*Project Dates: August 2021 – July 2026*

**Climate-Smart Trait Development in Oat Germplasm for Canada** by Kirby Nilsen AAFC. This project replaces the Prairie Oat Breeding Consortium (POBC) which provides funding for the AAFC oat breeding program in Brandon, MB. This project aims to develop new high-yielding oat varieties for Canadian farmers through applied breeding techniques that enhance agronomic performance, milling quality, disease resistance, and sustainability. By utilizing genomics-assisted breeding strategies, the project seeks to efficiently incorporate desirable traits such as yield, reduced plant height, improved standability, and early maturity. The goal is to create oat varieties that adapt to a wide range of environmental conditions while meeting



quality standards of the milling industry. These improvements are projected to increase farm profitability and ensure market competitiveness across the approximately 3 million acres sown to oats annually in Canada.

*Project Dates: April 2023 - May 2028*



***Dissecting the association of flowering time and yield in oat*** by Dr. Jaswinder Singh, McGill University. Objectives are: 1) Identification of regulatory sequences in the identified gene/chromosome region, and refining of gene editing in oat. 2) Development of specific CRISPR constructs. 3) Transformation of the said constructs into oat for developing mutant lines. 4) Genotypic and phenotypic screening of oat mutant lines. The AOGC/POGA board continue to look at options for CRISPR technologies in oats. While the board is not moving forward to market a CRISPR oat at this time, they do want to make sure that oats are ready to proceed if growers, and the consumers, want to have this technology available.

*Project Dates: June 2024 - May 2026*

### **Variety/Trials**

***Alberta Variety Trials*** led by Gateway Research Organization, Westlock, AB will test 11 approved milling varieties to investigate the impact of the variety and growing conditions on the yield and beta-glucan in both Westlock, AB and Fahler, AB. The goal of the trials is to determine if a variety with higher beta-glucan can consistently outperform Morgan oats in Alberta to meet oat miller demands for higher beta-glucan. It will also compare older oat varieties that still perform well and are grown on many acres, with the new varieties. The comparison of commonly grown varieties, both old and new, has been found to be beneficial in all three Prairie provinces.

*Project Dates: 2016-2027*

***Oat Lodging: Identifying key root and shoots traits for improved standability*** led by Dr. Feurtado and Dr. Aaron Beattie. This project will evaluate root system architecture in oat cultivars which vary in lodging resistance. It will evaluate stem and root lodging in field trials; assess impact of seeding rate on key stem and root lodging-related traits; assess the correlation between various root phenotyping methods; and compare root system architecture between Canadian oat germplasm and a diverse set of oat germplasm. Lodging and mechanical failure of the stem or root system is a significant issue for oats, leading to yield reductions for producers. Identifying root and stem traits important for lodging resistance will lead to enhancements in breeding cultivars with greater standability.

*Project Dates: April 2022 – March 2025*



***Different Oat Varieties, PGRs (Plant Growth Regulators), Seeding Rates and their Interaction of Lodging and Shattering*** by Dr. Linda Gorim, University of Alberta. Objectives are: 1) To identify the PGR-oat variety pairs that lead to significant plant height reduction and subsequent lodging under different environments. 2) To assess the effects of two PGRs (Moddus® and Manipulator®) on other agronomic parameters in different oat varieties. 3) To assess the effects of increased seeding rate on agronomic parameters in different oat varieties. 4) To evaluate the interaction of PGRs with seeding rates on agronomic parameters and shattering in different oat varieties. 5) To evaluate the effects of PGRs on oat agronomic parameters under drought conditions. 6) To carry out a morphological (*form and structure*) assessment of palea and lemma (*parts of the oat hull anatomy*) in different oat varieties and relate these structures to shattering under normal and drought conditions.

*Project Dates: April 2024 - March 2027*

### ***Insect/Disease/Weeds***

***Development of markers linked to oat crown rust resistance to help breed improved oat varieties for Canadian oat producers*** led by Dr. Aaron Beattie, CDC. To build on Western Canada's position as a supplier of premium quality oats to the current US markets, and developing markets like Mexico and Japan, requires developing varieties with a strong disease resistance package (of which crown rust resistance is a critical component). This will provide value to growers, through improved yield and reduced input costs (i.e. reduced fungicide use) which will help oat remain a viable crop within a grower's rotation, and to millers/food processors, through higher selectability (i.e. good plumpness and test weight).

*Project Dates: Dec 12 2018 –December 2024*

***The Prairie Crop Disease Monitoring Network*** led by Dr. Thomas Turkington, AAFC, Lacombe Research and Development Centre (RDC). The goal is to further develop and formalize the Prairie Crop Disease Monitoring Network (PCDMN), including annual in-person and/or online meetings. The group also will look to further develop and refine survey protocols, and continue work on disease information and awareness initiatives for a wider range of crops and diseases. The PCDMN Quick Disease Reporter Tool will be refined, and work will be done to develop disease assessment and risk assessment tools, as well as blackleg pathogen mapping. The network is also continuing their weekly cereal rust risk forecasts from mid-May to early June; new for 2023 was the addition of monitoring oat crown rust.

*Project Dates: April 1, 2023 – March 31, 2028*

***Insect Response to Climate Change and Ag-Inputs across the Prairies*** led by Dr. Meghan Vankosky, AAFC, Saskatoon Research and Development Centre. The project has 3 Objectives. First: *Understand insect pest population dynamics and forecast pest populations*. The project will evaluate the response of insect pests to climate variables to understand their population dynamics, outbreak frequency, and recent changes to insect distribution and relative abundance, using experiments and by continuing annual insect monitoring by the Prairie Pest Monitoring Network. Second: *Assess the current status of insecticide resistance in western Canada*. This portion will evaluate the current susceptibility of insect pests of cereal, pulse, and oilseed crops to registered insecticides commonly used in western Canada. Third: *Develop new insect information resources*. Lastly, the project will create information resources to augment insect outreach activities in western Canada.

*Project Dates: April 1, 2023 – March 31, 2028*

***The Prairie Weed Monitoring Network (PWMN): Building a Strong Biovigilance Foundation***, led by Charles Geddes, AAFC, Lethbridge RDC. This project aims to develop the Prairie Weed Monitoring Network (PWMN) and to implement a comprehensive weed biovigilance strategy, including: weed monitoring, risk assessment, and forecasting for the prairie region of Canada. This data, and that of past surveys, will be leveraged along with other open data resources to conduct spatial risk analyses for the evolution of herbicide-resistant weed biotypes of greatest concern and where they are most likely to occur, in addition to the development of a tool to forecast weed community shifts in response to management factors and climate change.


*Project Dates: April 1, 2023 – March 31, 2028*

***Understanding, Mitigating, and Managing PPO Inhibitor (Group 14)-Resistant*** by Dr. Charles Geddes AAFC, Lethbridge RDC. Objectives (note: wherever PPO-inhibitor-resistant kochia is mentioned, this refers to Group 14 resistance): 1) Determine cross-resistance to PPO-inhibiting herbicides in PPO-inhibitor-resistant kochia confirmed in Saskatchewan. 2) Determine cross- or multiple-resistance to other herbicide modes of action in PPO-inhibitor-resistant kochia. 3) Determine the mechanism conferring resistance to PPO-inhibiting herbicides in kochia. 4) Continue monitoring kochia survey samples for PPO-inhibitor resistance across the Canadian Prairies. 5) Assess efficacy of alternative herbicides to manage multiple herbicide-resistant kochia prior to crop seeding. 6) Determine the mid/long-term utility and sustainability of strategic tillage for kochia management. 7) Assess the impact of timing and implement/depth of soil disturbance on kochia emergence, density, and the soil seedbank. 8) Determine the



mid/long-term impact of winter cereals and perennials in crop rotations on multiple herbicide-resistant kochia.

*Project Dates: Jan 2024 - November 2029*




**On-Farm Fall Applied Granular Herbicide Products for the Control of Wild Oats and Kochia after Oats** led by Brianne McInnes at Northeast Ag Research Foundation. This project aims to answer the question of “How to best manage straw after an oat crop, prior to granular herbicide application.” This research will evaluate light harrow (45-degree angle) vs. a heavy harrow (70 to 90-degree) with treatments of either Edge, Fortress or no treatment. Project dates: September 2024 – November 2025

### **Fertility/Climate/Environment**

**Collecting the Carbon Data Needed for Climate-Smart Agriculture in Saskatchewan** led by Dr. Kate Congreves at the University of Saskatchewan. There is no direct annual data on net carbon footprints of Saskatchewan cropping systems. This project will address this gap by providing spatially and temporally integrated data on greenhouse gas (GHG; N<sub>2</sub>O and CO<sub>2</sub>) emissions at the field scale level. This information will be used to determine net ecosystem exchange and the cropping system net carbon footprint.


*Project Dates: January 2021 – December 2024*



**Long-term C and N<sub>2</sub>O monitoring, and climate-smart management of organic grain productions systems** led by Dr. Martin Entz, University of Manitoba. Objectives include: 1) Compare organic and conventional production in terms of N<sub>2</sub>O emissions over a growing season. 2) Compare organic and conventional production in terms of soil C storage over the long-term (32 years). 3) Determine the GHG footprints of organic wheat, oats and flax compared with conventional production. 4) Evaluate how mixing legume green manure cover crops with non-legume plant species affects N<sub>2</sub>O emissions during and after the green manure phase. 5) Evaluate how reducing tillage in the legume green manure cover crop termination phase affects N<sub>2</sub>O and ammonia emissions after legume termination. 6) Determine if fall cereals reduce the post-termination N<sub>2</sub>O emissions from alfalfa hay crops.

*Project Dates: April 2024 - March 2026.*

### **Nutrition/Product Creation**



**Development of a nutritionally enhanced plant-based milk alternative beverage from Canadian oats and study of its hypoglycemic effects** conducted by Dr. Lingyun Chen at the University of Alberta. This project is a continuation of Dr. Chen’s previous work to address

industry interest in using fractionated oat ingredients as a source of food product innovation. Research indicates that from a diabetic management perspective, a mere 1% decrease in glucose levels among diabetics can lead to a 21% decrease in death and a 37% decrease in heart attacks. Therefore, developing convenient diabetic-friendly drinks can help reduce the cost of treating people in Canada.

The specific objectives in the two-year project include:

1. Study competitive advantages of Canadian oats for development of healthy oat milk products; special emphasis will be placed on oat varieties that are high in yield, protein and beta-glucan.
2. Optimize processing to enhance recovery of oat nutritional components into a nutritionally enhanced oat milk drink with significantly improved protein and beta-glucan content.
3. Study peptides with anti-diabetic effects from oat protein for functional oat drink development and evaluate the drink hypoglycemic effect through in vivo test in diabetic animal model

*Project Dates: March 2021 – July 2024*

***Development of healthy food products by combining proteins and dietary fibers from oats and pulse*** conducted by Dr. Lingyun Chen at the University of Alberta. A dietary pattern that provides plant protein, dietary fiber and low fat has been shown to decrease the risks of chronic diseases (obesity, cardiovascular disease). The high-quality milling oats in Canada are good sources of both dietary fiber and plant protein. The long-term goal of this research is to develop high quality protein and fiber ingredients from oats for healthy food development.

The short-term objectives (in the next 2 years) are to develop technology innovations to combine protein and dietary fiber from oats and pulse to fabricate:

1. Fat replacers for low fat dairy/dairy substitute product development; and
2. Texturized vegetable protein products for meat analogue applications.

This research will provide opportunities to add value to oats and pulses as two major crops in western Canada. The food products high in both plant protein and dietary fiber will provide consumers with healthy choices, and help control the prevalence of obesity in the society and lower the risks of chronic disease. This project is co-funded by RDAR.


*Project Dates: March 2022-May 2025*

***Dried Oat Oil Emulsion Powders Stabilized by Oat Hull Derived Nanocellulose*** led by Dr. Emily Cranston, University of British Columbia. The objective for the specific POGA-supported portion of the larger project was: To explore the isolation of cellulose-based nanomaterials from oat hulls and to use these as stabilizers in dried oat oil powders and oat milk powders. This research begins to show the potential for oat-hull (normally considered a 'low-value' product)



valorization. Several companies have indicated an interest in commercializing the research as well as using this technology to deliver fertilizer and/or nutrients to agricultural crops.

*Project Dates: October 2023 - September 2024*



***A randomized controlled pilot study evaluating acute and chronic effects of oat polyphenols (Avenanthramides) on glycaemic control, insulin sensitivity and gut microbiota in pre-diabetes*** led by Drs. Dylan Mackay and Sijo Joseph, AAFC. Oats, rich in soluble fiber ( $\beta$ -glucan) and potentially beneficial phenolic compounds such as avenanthramides (AVs), show promise in managing type-2 diabetes (T2D). AVs may influence glucose levels by impacting glucose absorption. This proposed study will explore the effects of an oatmeal breakfast with varying AV concentrations on glycaemic control, and insulin sensitivity, in individuals who have prediabetes. By uncovering the connection between oat components and glucose metabolism, this research aims to provide critical insights into nutrition-based T2D strategies involving oats.

*Project Dates: October 2024- 2026*

### **Intercropping/Other**

***Improving Productivity/Resilience of Canadian Prairie Cropping Systems*** led by Dr. Kui Liu, AAFC. Objectives are: 1) Develop a future, resilient cropping system in each of the major ecozones on the Canadian prairies and develop a “sustainability index” which integrates cropping system indicators such as crop productivity, resource use efficiency, weeds, diseases, soil health, whole-farm economics, and environmental footprint. 2) Assess and improve soil health through integrated crop management practices. 3) Evaluate the benefit/cost and economic returns of major cropping systems on the Canadian Prairies. 4) Enhance soil carbon sequestration and reduce greenhouse gas emissions through improved agronomic management practices.

*Project Dates: April 2023 - March 2028*

***Continuing studies on intercropping for increasing yield and quality of grain and forage crops, and improving soil quality*** led by Dr. Myriam Fernandez, AAFC. This project will look at the relationship between various intercrop dynamics to see where benefits can occur. Intercrop species use soil available nutrients and soil moisture, and at given times inter- and intra-competition are expected. Specifically, the project will look to determine if intercrops with crops or a living mulch can reduce weeds compared to sole crops and will look at various seeding ratios to evaluate impact on each crop. It will aim to identify if there is a nitrogen benefit from legumes in the intercrop to its companion crop, as well as look to determine the biomass and grain yield/quality due to the intercrop dynamics. It will also look at the disease

pressures, and evaluate if intercrops have less disease than monocrops, as well as develop crop growth and nutrient models for intercrop versus monocrop scenarios.

*Project Dates: April 2023 – August 2027*

***Develop New Strategies to Efficiently Utilize Oat Grains in High Production Dairy Cows to Maximize Economic Return and Benefit to Prairie Oat Growers*** led by Dr. Peiqiang Yu, the University of Saskatchewan, is a five-year project that aims to increase and enhance basic knowledge of the optimal nutrient supply to dairy cattle through variety selection, feed processing, and optimal feed ingredient blending. Objectives within this project include: finding the best oat variety or type of oat grain with the highest Feed Milk Value (FMV) for dairy cattle; improving the FMV of oats through processing applications; and finding the maximum or optimum level of oats to replace barley in high production lactation dairy cow diets. Among other things, this project will carry out a detailed metabolic study in dairy cattle to understand the effects of feed processing on rumen fermentation, degradation kinetics, intestinal digestion, and truly absorbed nutrient supply from Prairie oat grains to dairy cattle using various techniques. Note, this project was extended due to challenges during COVID.

*Project Dates: April 2016 – extended to March 2025*

***Ag Transport Coalition (ATC)*** led by Pulse Canada. The ATC collects data on the performance of the two major railroads in Canada with respect to various performance metrics, and compiles that data into reports available to subscribers and members. These reports will enable POGA to stay up-to-date on transportation logistics and better represent oat growers when issues arise. Daily/weekly reports posted to the ATC website are also available to producers.

*Project Dates: July 2024 - March 2029*

***Intercropping Pea with Canola or Oat: impact on nitrogen, disease and economics***, led by Dr. Liu Kui at AAFC Intercropping pea with oat or canola enhances biodiversity and likely increases resource (e.g., nitrogen, water, and phosphorus) use efficiency. The improved quality and quantity of straw from the intercrops likely affect straw decomposition, soil health, soil carbon, and N dynamics. In this study, the effects of intercropping on soil particulate organic matter carbon and N will be determined. This study was conducted at three sites in Saskatchewan. This project was completed in 2024.

***Agri-Food Innovation and Sustainability Enhancement Chair***, Stuart Smyth, U of S. SaskOats has joined with 10 other public, private and producer organizations to support the Agri-Food Innovation and Sustainability Enhancement Chair held by Dr. Stuart Smyth at the University of Saskatchewan for the next 5 years. Dr. Smyth's research focuses on quantifying sustainability

improvements in prairie agricultural practices, which informs policy makers about the achievements that have occurred without regulations. Over the coming 5 years, he will launch the Agricultural Knowledge Mobilization Laboratory, which will collaborate with funding partners and other interested agricultural organizations to develop communication resources for the industry. Part of these communication activities will endeavor to include an annual workshop that will identify emerging policy/regulatory issues requiring new communication resources.

Project Dates: 2024-2028

### **MARKET DEVELOPMENT PROJECTS**

**Expand the Canadian Oat Market: Mexico** is funded in part by AAFC and directed by POGA through Emerging Ag. Mexico is the second largest importer of oats globally and several other Latin American countries who import oats could offer additional opportunities for Canadian exports. A long-term strategy for POGA is to make use of the proximity to these markets and build on the strong Canadian reputation for products in Mexico which would support the efforts to differentiate Canadian oats. This project focuses on diversification of Canadian oat exports to Mexico. The activities aim to increase per capita consumption of oats, increase Canadian oat exports to Mexico, increase consumer awareness of the health benefits of oats, and develop partnerships with the Mexican nutrition and health communities. Since this project began in 2015, Canada has been able to more than triple its oat exports to Mexico (Note: 2021 was not included in this export number as widespread Western Canadian drought did not allow the supply of oats to maintain the 2020 levels).

\*Year to Date of September 2024, Canada continues to maintain its position as the main exporter to Mexico and accounts for 92% of the overall market share. Canada is the lead exporter in two key categories, oats other than seed, and groats and meal of cereals. During the first three quarters of 2024, Mexican oat imports have already reached over 146,000 tonnes. This trend suggests that the total import volume for 2024 could be comparable to 2023, when the Mexican market reached a record high of over 230,000 tonnes.

**Expand the Canadian Oat Market: Peru** funded in part by AAFC and directed by POGA through Emerging Ag. A long-term strategy for POGA is to make use of the proximity to the Latin American markets. This year the emphasis has been on building the strong Canadian reputation for products in Peru which would support the efforts to differentiate Canadian oats. This project focuses on diversification of Canadian oat exports to Peru. The activities aim to increase per capita consumption of oats, increase Canadian oat exports to Peru, and increase consumer awareness of the health benefits of oats.



Oat imports to Peru increased steadily from 2018 to 2020 and reached an all-time high of nearly 90,000 tonnes imported in 2023. As of September 2024 (Year to Date), Canada remains the leading exporter to Peru, holding more than 60% of the market share for the past two years. When comparing the 2018-2020 year to date vs the 2024 year to date (through September). In this time, Canada has become the main exporter to Peru with 55.5% of the market share, followed by Chile who had 44% of the market share. The biggest proportion of oats being imported to Peru is oats other than seed, all of which are supplied by Canada in 2024\*. Chile is the largest supplier of both oat flakes/rolled oats and worked grain of oats. There is a growing demand for oats in Peru, with Canada firmly establishing itself as one of the key exporters.

POGA intends to add one other country to the promotion program from the region next year.  
Project Dates: April 2023 - March 2026.

**Expand the Canadian Oat Market: Japan** is funded in part by AAFC and directed by POGA through Emerging Ag. The intent is to increase demand for Canadian oats by promoting the health benefits of oats to the Japanese market. Japan is the fourth largest importer of oats globally, and Canada has been the leading exporter of oats in recent years. Canada is the largest supplier of raw oats in Japan (excluding 2021 due to low availability of Canadian oats); however, the goal is to gain market share in the human-consumption arena. The campaign is focused on trade advocacy, as well as social media outreach to highlight the nutrition and health benefits of oats in daily diets.

In the Japan market, Canada and Australia stand out as the primary exporters. For 2024, Canada is the lead exporter with 48% of the market share, Australia follows behind with 38% of the market share. Canada is the leading exporter of oats other than seed, accounting for 74% of all exports in this category. \* Australia is the lead exporter of oat flakes/rolled oats.

Oat exports to Japan were down slightly in 2023 from recent years, however, since the 2021 drought, which limited supply, Canada has successfully reestablished itself as a key player in oat exports to Japan. With a stable oat supply from Canada, there exists a promising opportunity to further expand and enrich this market.

Project Dates: April 2023 - March 2026.

\*International Statistics from Global Trade Tracker.

**Expand the Canadian Oat Market: Canada** funded in part by AAFC and the Government of Saskatchewan Market Development Grant and directed by POGA through Emerging Ag. Canadian consumption of oats has been steadily increasing over the years. In 2024/2025 (YTD: Jan – Aug), oat consumption in Canada has remained stable at 1.95 million tonnes, consistent with the levels recorded in 2023/2024. However, oats are still perceived as a breakfast cereal rather than an ingredient to be used in food for the rest of the day. It is important to educate Canadians on the health benefits of oats for things such as heart disease, high cholesterol, obesity and diabetes to name a few. There is an increasing desire to eat “local” as well to reduce the environmental footprint related to the transportation of goods. The website “Oats Everyday” has been geared to Canadian consumers (and materials are supplied in both French and English).

Project Dates April 2023 - March 2026.

**Keep It Clean Cereals (KIC)** is a program that shows Canada’s commitment to delivering consistently superior agricultural products to markets around the world. Keep it Clean is an established program started by the Canola Council of Canada and expanded with Cereals Canada and POGA. This program targets Western Canadian producers and aims to provide producers with proper information to get their cereals ready for the export market by highlighting important export standards and expectations. This project is important as it reminds oat growers of the possible issues of not meeting export standards around residue limits and mycotoxins like Fusarium and Ochratoxin A.- It also informs international and domestic buyers that Canada is taking measures to meet customer expectations through best management practices. POGA also provided additional funding for the creation of *Keep it Clean* videos with key messages like proper glyphosate use to keep markets open.

**Market Access to China** – funded in part by AAFC and directed by POGA through Emerging Ag. POGA, in 2017 contracted Emerging Ag to work towards removing a phytosanitary barrier that will not allow raw Canadian oats into China. Work continued on this until early 2019 but as political challenges grew between Canada and China. POGA confirmed through the Government of Canada that no progress would be made on this issue until Government relations between the two countries improved. POGA continues to remain committed to work to address the market access issues in China once politically feasible.

**India.** In 2016, POGA applied to the AAFC Market Access Secretariat for elimination of the requirement for methyl bromine fumigation on raw oats for human and feed consumption as well as a reduction in tariffs for processed oats and groats into India. Methyl bromide is not legally allowed to be applied in Canada. POGA is incredibly happy to report that, as of October 27, 2023, Canada is on India's list of methyl bromide phased-out countries. Therefore, Canadian

exports are exempt from incurring the fumigation penalty. Canadian oats must continue to be fumigated with methyl bromide upon arrival at port in India, but will not incur a penalty.

*\*Most of these projects are partially funded by one of the following: Through the Canadian Agricultural Partnership (CAP), AgriScience Program (ASP): Projects Component and the AgriMarketing Program (AMP)-National Industry Association Component; the Government of Canada under the Sustainable Canadian Agricultural Partnership's (SCAP) AgriScience Program, the Saskatchewan Ministry of Agriculture through the Agriculture Development Fund (ADF) and the Canada-Saskatchewan Growing Forward 2- Bi-lateral agreement, and the Agricultural Demonstration of Practices and Technologies (ADOPT) initiative under the Canada-Saskatchewan Growing Forward 2 - Bi-lateral agreement; the Saskatchewan Market Development Fund; Results Driven Agricultural Research (RDAR); Western Grains Research Foundation (WGRF); Natural Sciences and Engineering Research Council of Canada (NSERC); and industry partners.*

## **SUMMARY**

SaskOats has successfully contributed to the profile, representation, and profit of Saskatchewan oat growers. Since 2008, oat growers in Western Canada have contributed less than 14 cents of every dollar spent on research and marketing. The remainder is funded through partnerships and collaboration among industry and government.

SaskOats will continue developing strategic relationships through POGA and industry partners to increase oat producer profitability by enhancing producer investments in oat research and market development. As well, the commission will work on increasing the market share of oats and promoting/developing new products to meet consumer demands.

**BOARD OF DIRECTORS**

**Ambrely Ralph**

**Chair**

Arborfield, SK

**Landon Kuschak**

**Vice-Chair**

Ituna, SK

**Elwood White**

**Audit Chair**

Pangman, SK

**Jessica Slowski**

Sheho, SK

**Ryan Zuchkan**

Foam Lake, SK

**David Katerynych**

Richard, SK

**STAFF**

**Shawna Mathieson**

Executive Director

Watson, SK

[smathieson@poga.ca](mailto:smathieson@poga.ca)

**Kaitlyn Kitzan**

Marketing Coordinator/Admin Assistant

Yorkton, SK

[events@poga.ca](mailto:events@poga.ca)

**Payee List for SaskOats 2023-2024 Year**

**Personal Services (Total received by Directors, All others threshold is specified)**

**Directors**

**Honorariums**

Chris Rundel	\$ 350
Jessica Slowski	\$ 1,000
Ambrely Ralph	\$ 1,400
<u>Elwood White</u>	<u>\$ 600</u>
<b>TOTAL</b>	<b>\$ 3,350</b>

**Out of Pocket**

Chris Rundel	\$ 321
Jessica Slowski	\$ 1,319
Ambrely Ralph	\$ 1,043
<u>Elwood White</u>	<u>\$ 564</u>
<b>TOTAL</b>	<b>\$ 3,247</b>

**Research and Development (\$5,000.00 threshold)**

University of Saskatchewan	\$ 78,750
SK Variety Performance Group	\$ 20,980
Northeast Agriculture Research Farm	\$ 13,780
Western Applied Research Corporation	\$ 12,280
East Central Research Foundation	\$ 10,900
Indian Head Agricultural Research	\$ 10,400

**Extension/Education (\$5,000 threshold)**

SaskCanola	\$ 5,000
Agriculture in the Classroom	\$ 30,000

**Supplier Payments (\$5,000.00 threshold)**

Agricultural Council of Sask. Inc.	\$ 24,495
Baker Tilly (Auditor)	\$ 8,991

**Market Development (\$5,000 threshold)**

R and D and Communications funded via POGA	\$305,339
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**SaskOats 2024-2025 Budget**

**Revenue**

Check-off levy (\$.75/tonne)	\$ 1,125,500
Check-off refunds @ 7%*	(\$78,785)
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	\$1,046,715
Interest Income	\$60,000
	<hr/>
	<hr/> <b>\$1,106,715</b>

**Expenses**

Board of Directors	\$8,000
Communications/Education	\$40,500
Levy Administration Fee	\$24,826
Producer Meetings	\$14,500
Proportionate expenses of POGA	\$484,803
Research and Development	\$119,550
General and Administrative (Audit, Legal, Elections, memberships, etc.)	\$14,875
	<hr/>
	\$707,054
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<b>Excess of revenues over expenses</b>	<b>\$399,661</b>

- ***In 2023-2024 SaskOats Refund Requests were 7.1% of dollars collected and 3.4% of the total number of producers paying the levy.***