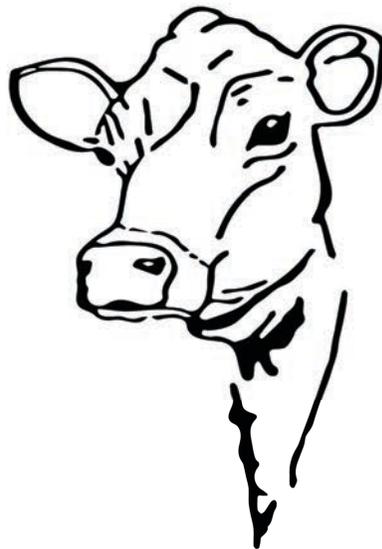


**Wednesday, February 22, 2023**

**Woodstock Fairgrounds  
875 Nellis Street  
Woodstock, ON**

*The 38th Annual*  
***SOUTH WESTERN  
ONTARIO  
DAIRY SYMPOSIUM***



***AN INTERACTIVE EVENT PLANNED  
BY PRODUCERS . . .***

***. . . FOR PRODUCERS!***



*DREAM. GROW. THRIVE.*

You're invested  
in your business

So are we

Partner with the only lender  
100% invested in Canadian  
agriculture and food.

1-800-387-3232 | [fcc.ca](http://fcc.ca)

# ***THE 38th ANNUAL***

**The South Western Ontario Dairy Symposium is organized by Dairy Farmers of Ontario through its Dairy Producer Committees in Essex-Kent, Lambton, Middlesex, Elgin, Huron, Perth, Oxford, Waterloo, Wellington, Brant, Norfolk, Wentworth, Haldimand, and Niagara Counties, in cooperation with the Ontario Ministry of Agriculture, Food and Rural Affairs.**

Our committee is made up of the following people on behalf of their DPC Committees:

<b>Brant County:</b>	Chris Vandenberg
<b>Elgin County:</b>	Vacant
<b>Essex-Kent County:</b>	Vacant
<b>Haldimand County:</b>	Vacant
<b>Huron County:</b>	Lieven Verschaeve
<b>Lambton County:</b>	Vacant
<b>Middlesex County:</b>	Vacant
<b>Niagara County:</b>	Vacant
<b>Norfolk County:</b>	Reyer/Anna Van der Steege
<b>Oxford County:</b>	Jack Danen Steven Veldman (Chair) Pete Overdevest
<b>Waterloo County:</b>	Vacant
<b>Perth County:</b>	Vacant
<b>Wellington County:</b>	Nick Ammerlaan
<b>Wentworth County:</b>	Gordon Alblas
<b>DFO:</b>	Murray Sherk
<b>Technical Coordinator:</b>	Brian Lang
<b>Food From our Farm Coordinator:</b>	Jack Rodenburg

## **Event Coordinator**

Jane Danen

Email: [southwestdairysymposium@gmail.com](mailto:southwestdairysymposium@gmail.com)

Phone: 519-655-2865

## **Program Coordinator**

Anita Heeg - OMAFRA

Email: [Anita.Heeg@ontario.ca](mailto:Anita.Heeg@ontario.ca)

Phone: 226-228-0219

**THE PROGRAM:**

- 9:00 a.m. Exhibits Open**  
*Registration and Coffee*
- 10:15 a.m. Welcome**
- 10:20 a.m. Accessing Offshore Labour for your Dairy**  
*Joanne Fallis, J.Fallis Immigration Consulting*
- 10:55 a.m. Optimal Health and Production on Robotic Dairies**  
*Dr. Trevor deVries, University of Guelph*
- 11:25 a.m. Raising Dairy Beef Calves**  
*Dr. Mike Steele, University of Guelph*
- 12:05 p.m. Lunch**
- 1:20 p.m. State of the Industry**  
*Michael Barrett, Gay Lea Foods*
- 2:20 p.m. Breeding Strategies for Optimum Genetic Progress**  
*Dr. Allison Fleming, Lactanet Canada*
- 2:40 p.m. Reducing Water Use on the Dairy Farm**  
*Dr. Andrew VanderZaag, Agriculture & Agri-Food Canada*
- 3:00 p.m. Speak Your Mind**  
*Board Member, Dairy Farmers of Ontario*
- 4:00 p.m. Exhibits Close**

*Let us know how your day is going!*

Follow and tweet using the hashtag: **#SWODS2023**

Find us on:  @SWODSdairy  @SWODSdairy



**YOUR LOCAL BUTCHERS/MEATMARKET**

432 HIGHLAND RD E, STONEY CREEK, ON L8J 3G4  
(905) 662-8396



**ONE OF THE LARGEST FRESH MEAT COUNTERS IN ONTARIO**



**NATURALLY SMOKED SAUSAGES**

**NATURALLY SMOKED MEATS**

**SAUSAGE MAKING SUPPLIES**

**CATERING**

**WHOLE BBQ PIGS & SPIT RENTALS**

**RETAIL & WHOLESALE**

**DELI, BAKERY CAFE,**

**FROZEN SEAFOOD AND FRESH PRODUCE**



[www.highlandpackers.com](http://www.highlandpackers.com)



**Scotiabank**

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



**A & L CANADA  
LABORATORIES INC.**

.....

**CAN YOU AFFORD NOT  
TO KNOW YOUR  
FEED QUALITY?**





CONTACT US TO LEARN  
ABOUT OUR WIDE RANGE  
OF FEED SERVICES

1 (855) 837-8347  
alcanadalabs@alcanada.com

www.alcanada.com

@alcanadalabs



DESIGN | INSTALLATION | SERVICE

Listowel - Granton

ROBOTIC MILKING | FEED & BARN CARE EQUIPMENT  
FACILITY DESIGN | STABLING | MANURE  
GRAIN HANDLING EQUIPMENT & MORE
















☎ Ph: 519.418.2507    ✉ info@avonbank.ca

**avonbank.ca**      

**Keeping the  
farm going  
since 1893**





**SUPREME**  
AGRIBUSINESS INSURANCE

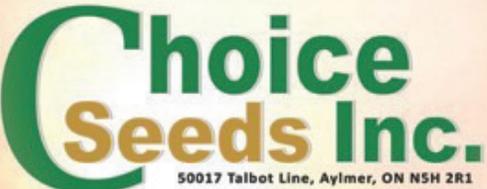
Dairy - Poultry - Beef - Grain - Hog - Equine - Hobby



**Ayr Farmers  
Mutual**  
Insurance Company

519-632-7413  
1-800-265-8792

www.ayrmutual.com



50017 Talbot Line, Aylmer, ON N5H 2R1  
Ph# (519) 878-3728 Fax: (519)765-1317

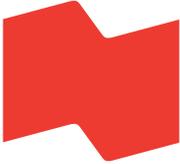
**DIGESTIBLE ENERGY BOOSTS  
LIVESTOCK PERFORMANCE**







Call or email for closest dealer (dgnweber@gmail.com)



**NATIONAL  
BANK  
OF CANADA**

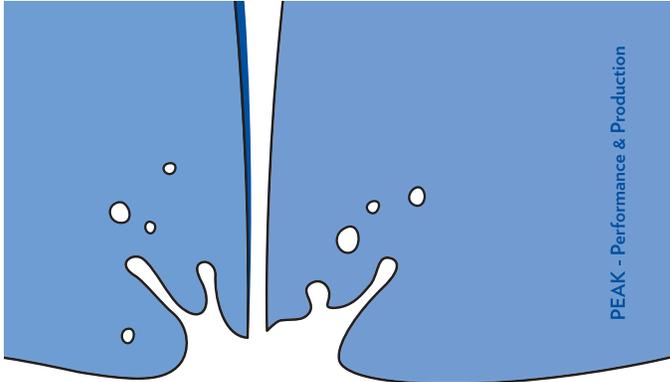


**Dortmans Bros. Barn Equip. Inc.**  
2234 Egremont Dr. Strathroy ON N7G 3H6  
**1.800.265.3435**  
**www.dortmansbros.com**  
Strathroy • Salford • Jarvis • Elmira • Wellesley

*It's a Matter of Choice.  
Where Every Sale is Backed By Service*



**McFarlan™  
Rowlands**  
Insurance Brokers Inc



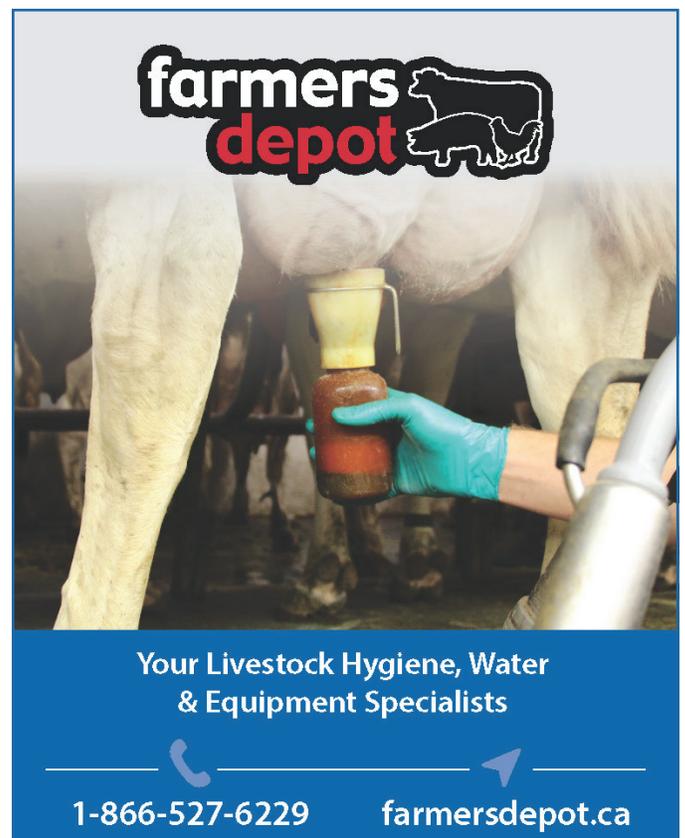
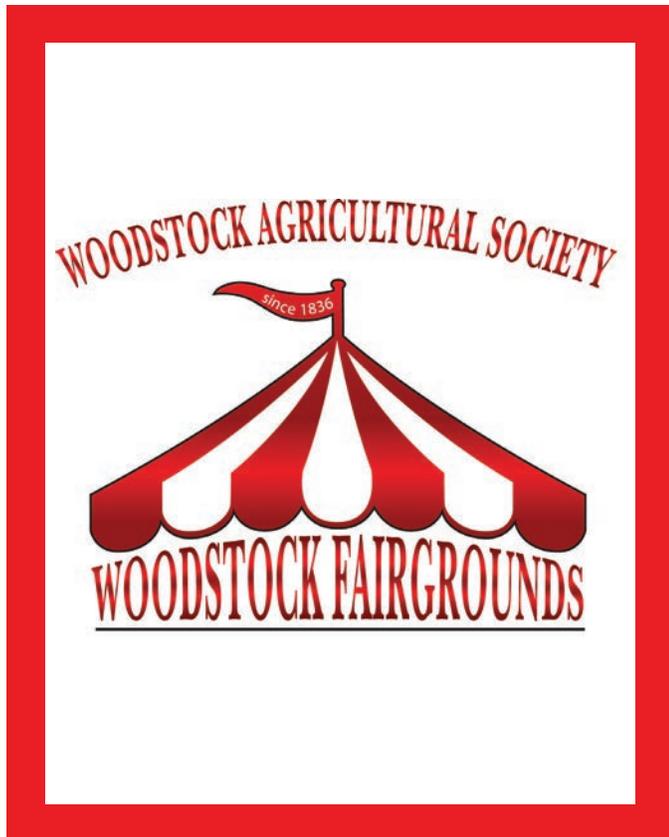
PEAK - Performance & Production

Move your business forward  
with Jefo Protected B Vitamins  
for lactation!

-  Increase milk yield and components
-  Enhance reproductive performance
-  Improve feed efficiency

 **Jefo** Life, made easier. [jefo.com](http://jefo.com)

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



**FOR ALL THE RIGHT REASONS**

ALWAYS PROUD TO SUPPORT YOU WITH A COMPLETE RANGE OF PRODUCTS, SERVICES, AND DAY-TO-DAY SOLUTIONS

Reproduction • Vaccines • Calcithery • Teat Sealant • Biosecurity • Antibiotics • Vitamins

**90 YEARS**

**vetoquinol**  
ACHIEVE MORE TOGETHER

CONSULT YOUR VETERINARIAN

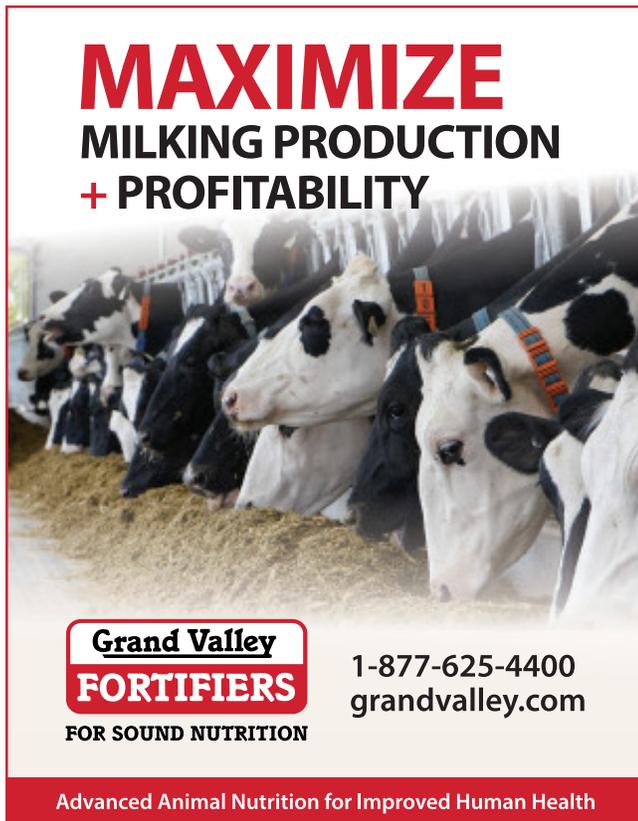
www.vetoquinol.ca

*Founded in 1933, Vetoquinol is an independent, family-owned business.*



**BLYTHE BRAE FARMS**

519-537-5105  
www.soys.com

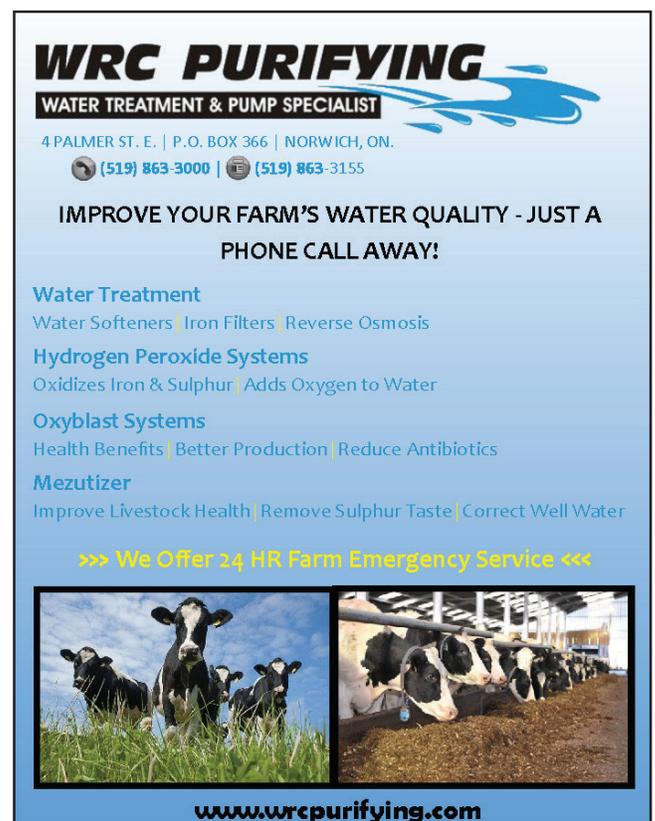


**MAXIMIZE MILKING PRODUCTION + PROFITABILITY**

**Grand Valley FORTIFIERS**  
FOR SOUND NUTRITION

1-877-625-4400  
grandvalley.com

Advanced Animal Nutrition for Improved Human Health



**WRC PURIFYING**  
WATER TREATMENT & PUMP SPECIALIST

4 PALMER ST. E. | P.O. BOX 366 | NORWICH, ON.  
(519) 863-3000 | (519) 863-3155

IMPROVE YOUR FARM'S WATER QUALITY - JUST A PHONE CALL AWAY!

**Water Treatment**  
Water Softeners | Iron Filters | Reverse Osmosis

**Hydrogen Peroxide Systems**  
Oxidizes Iron & Sulphur | Adds Oxygen to Water

**Oxyblast Systems**  
Health Benefits | Better Production | Reduce Antibiotics

**Mezutizer**  
Improve Livestock Health | Remove Sulphur Taste | Correct Well Water

»»» We Offer 24 HR Farm Emergency Service «««

[www.wrcpurifying.com](http://www.wrcpurifying.com)

# ***THE 38<sup>th</sup> ANNUAL***

## **Ins and Outs of Temporary Worker Program: Where to start, employer responsibilities and program outline**

Joanne Fallis, J Fallis Immigration Consulting

### **What is a Labour Market Impact Assessment?**

A Labour Market Impact Assessment is also known as an LMIA. An LMIA application must be submitted to ESDC for approval. An employer must be issued a positive LMIA to hire a Temporary Foreign Worker under the Agriculture Stream of the LMIA program. The LMIA will show that there is a need for a foreign worker to fill a job when there are no Canadians or permanent residents available for the position(s).

### **What is a Temporary Foreign Worker?**

A Temporary Foreign Worker is also known as a TFW. A TFW is a worker from another country who has been given authorization to work in Canada temporarily. The TFW will be issued a work permit to work within Canada.

### **Who are the governing bodies?**

When it comes to LMIA's the governing body is the Employment and Social Development Canada (ESDC). ESDC monitors, develops programs based on the labour market. When submitting an LMIA application, ESDC will review it and an agent will process the application.

When it comes to work permits the governing body is called the Immigration, Refugees and Citizenship Canada (IRCC). IRCC processes and issues all work permit applications. IRCC also deals with all immigration matters.

### **Who can apply?**

Any employer in the agriculture field can apply for an LMIA as long as you are primarily a business associated with agriculture.

### **How to determine what job to hire for?**

In Canada every job is given a National Occupational Classification which is also known as an NOC. The NOC will determine the job title, duties within the job title, wage, experience and if any education requirements are needed for the position.

# **THE 38<sup>th</sup> ANNUAL**

## **Ins and Outs of Temporary Worker Program: Where to start, employer responsibilities and program outline**

Joanne Fallis, J Fallis Immigration Consulting

### **LMIA Program Requirements:**

- Complete advertising requirements
- Provide transportation (from country of origin to place of employment)
- Provide day to day transportation if housing is off farm
- Provide TFW with suitable and affordable housing (housing must be inspected prior to LMIA application)
- Follow all wage tables relevant to the job and its prevailing wage
- Provide health insurance until the TFW is eligible for OHIP
- Provide a safe and abuse free workplace
- Follow all government compliance

### **What does an Immigration Consultant do?**

As a licensed Immigration Consultant, I work with farmers to obtain a LMIA. This includes meeting with the farmer and discussing options and the best approaches to hiring a TFW. These services also include completing and submitting an LMIA on behalf of an employer and then working with the employer to find a suitable TFW and providing the TFW with all the documentation to apply for a work permit.

### **Resources:**

ESDC

<https://www.canada.ca/en/employment-social-development.html>

IRCC

<https://www.canada.ca/en/services/immigration-citizenship.html>

NOC

<https://www.canada.ca/en/immigration-refugees-citizenship/services/immigrate-canada/express-entry/eligibility/find-national-occupation-code.html>

# ***THE 38<sup>th</sup> ANNUAL***

## **Ins and Outs of Temporary Worker Program: Where to start, employer responsibilities and program outline**

Joanne Fallis, J Fallis Immigration Consulting

### **LMIA Program Requirements**

- Provide all supporting documentation
- Provide Housing- Low skill and high skill on farm housing maximum \$30.00 per week. High Skill off farm housing, no more than 30% of the employee's gross wages.
- Housing Inspection (completed by authorized inspector through local health unit)
- Provide travel accommodations
- Provide health insurance
- Provide full time continuous employment
- Follow all program requirements and provincial labour standards
- Job Bank account

### **Program Outline**

- Determine stream and National Occupational Classification (NOC)/ determine wage and skill level of occupation and requirements of job
- Determine wage by commodity and National Occupational Classification (NOC); Dairy- Low Skill- \$15.83 per hour High Skill- \$17.50 per hour
- National Occupational Classification (NOC) codes accepted under Agricultural Stream (All wages are determined by the agriculture commodity specifically)-  
NOC 82030- Agriculture service contractors and farm supervisors  
NOC85100- General farm workers
- Complete advertising requirements (Job bank and two other sources for a minimum of 14 days)
- Complete housing inspection
- Complete application form
- LMIA issuance, provides LMIA to temporary foreign worker(s) as well as supporting documentation.

### **Fees/ Associated Costs**

- Exempt from governments fees for primary agriculture
- Advertising fees if necessary
- Housing requirements (Beds, dishes, basic essentials)
- Housing Inspection fees if required
- Immigration consulting fees
- Travel expenses
- Health insurance coverage



# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

**HEALTHYLIFE**  
OPTIMAL TRANSITION, LIFETIME PRODUCTION

**Bringing science and knowledge for an efficient transition to lactation**

[trounutrition.ca](http://trounutrition.ca)

**trouw nutrition**  
a Nutreco company

**UDDERLY SAFE**  
Growing Safe Farms

UdderlySAFE is your one stop shop for all your HR and Health and Safety needs.

**We provide customized HR and Safety solutions for your farm!**

Our program includes training, policies, and procedures. Accessible anytime via our online software. All managed for you!

Contact your UdderlySAFE Team at:  
519-532-2508  
[info@peoplemanagementgroup.com](mailto:info@peoplemanagementgroup.com)  
[www.peoplemanagementgroup.com](http://www.peoplemanagementgroup.com)



*Knowledge. Clarity. Action.*

**Together, we can grow your future.**

BNG pairs experience and education to provide you with the tools to grow your farm business.

**bng** | **BOSSY NAGY GROUP**  
Chartered Professional Accountants

1-888-522-2231  
BNG-CPA.CA

**BRODIE**

**PENTA** **FARESIN** INDUSTRIES

**NDECO** **TRIO LIET**  
FEEDING TECHNOLOGY

**Supreme**  
INTERNATIONAL

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Optimizing Health and Production on Robotic Dairies

Trevor deVries, University of Guelph

### Optimizing Health and Production on Robotic Dairies

South Western Ontario Dairy Symposium  
February 22, 2023

Trevor DeVries  
tdevries@uoguelph.ca



### Recent benchmark data from 197 robot herds in Canada

Variable	Mean	Range	Holstein (n=178)	Mean
# of lactating cows	110	37-991	Milk yield (kg/d)	37.7
Cows per AMS unit	48	24-64	Milk fat (%)	4.04
# of AMS units/farm	2.4	1-17	Milk protein (%)	3.40
DIM	172.5	127-226	SCC (x1,000 cells/mL)	181.2
Parity	2.4	1.7-3.4	Non-Holstein (n=19)	
# of lactating cow groups	1.4	1-8	Milk yield (kg/d)	27.7
			Milk fat (%)	4.88
			Milk protein (%)	3.77
			SCC (x1,000 cells/mL)	201.4

Motson et al. 2021, J. Dairy Sci. 104:7971-7983

### Recent benchmark data from 197 robot herds in Canada

Variable	Number of herds	% of total herds
<b>Cow traffic system</b>		
Free flow	173	87.8
Guided	24	12.2
<b>Lying area type</b>		
Freestall	182	92.4
Pack	11	5.6
Mixed	4	2.0
<b>Bedding base</b>		
Deep bedding	80	41.7
Mattress	112	58.3
<b>Bedding type</b>		
Organic	145	73.6
Inorganic	52	26.4

Motson et al. 2021, J. Dairy Sci. 104:7971-7983

### What benefits should automated (robotic) milking provide to producers?

- Greater milking frequency and yield
- Improved cow health and reproduction
- Potential for greater herd management
  - Information (data) collection and use
- Less and/or more flexible use of labour
- Improved profitability and quality of life

Tse et al. 2017, J. Dairy Sci. 100:2404-2414; Tse et al. 2018, J. Dairy Sci. 101:9599-9607; Tse et al. 2018, Anim. 12:2649-2656

### Perception of changes with transition to robotic milking

- Perceived improvements after transition on a scale of 1 (strongly disagree) to 5 (strongly agree)

Robotic milking has...	Improved profitability	Met my expectations	Improved my quality of life	Improved quality of my cows' lives
Average score	3.8	4.4	4.5	4.5

Tse et al. 2018, J. Dairy Sci. 101:9609-9607

### What benefits should robotic milking provide to the cows?

- More behavioral freedom
- Better health (and production)

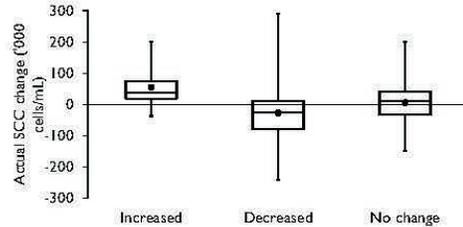
# THE 38<sup>th</sup> ANNUAL

## Optimizing Health and Production on Robotic Dairies

Trevor deVries, University of Guelph

Not all these benefits may be realized...or actually occurring...

Perceived vs. actual change in SCC...



Duplessis et al. 2021. JDS Communications. 2:212-216

What are the impediments to good health and production on robotic farms?

- Cows that cannot milk when they want to
- Cows that do not want to go milk
- Poor udder health management
- Improper nutritional management

What are the impediments to good health and production on robotic farms?

- Cows that cannot milk when they want to
  - Barn design and management
    - Traffic/barn layout
    - Stocking density (AMS, stalls, feed bunk)

Denning et al. 2013. J. Dairy Sci. 96:344-351;  
King et al. 2016. J. Dairy Sci. 99:9069-9079;  
Matson et al. 2021. J. Dairy Sci. 104:7971-7983;  
Matson et al. 2022. J. Dairy Sci. 105:793-806

Free-traffic systems may promote greater milking frequency...

- 75 robot farms in Ontario, Canada
  - 67 free traffic
  - 8 guided traffic
- +0.37 milking visits per day for free traffic
  - = +2.1 kg/d milk yield

Matson et al. 2022. J. Dairy Sci. 105:793-806

Number of cows per robotic unit...

- Surveys of Canadian robot stocking density...
  - King et al. 2016 – 41 herds in Ontario and Alberta
    - Mean = 49 cows, range 30 to 63
    - Milking frequency ↓ 0.22 x/d for each ↑ 10 cows/unit
  - Matson et al. 2022 – 75 herds in Ontario
    - Mean = 44 cows, range 24 to 64
    - Milking frequency ↓ 0.15 x/d for each ↑ 10 cows/unit

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Optimizing Health and Production on Robotic Dairies

Trevor deVries, University of Guelph

### Results from 2019 study of robotic farms (n=197) across Canada...

- Mean = 64 cm [25 inches]/cow; SD = 21.5 cm [8.5 inches]/cow
- For every 10 cm [4 inch] increase in feed bunk space...
  - + 0.3 kg/d milk yield

DAIRY  
GUELPH

Matson et al. 2021, J. Dairy Sci. 104:7971-7983

### What are the impediments to good health and production on robotic farms?

- Cows that do not want to go milk

DAIRY  
GUELPH

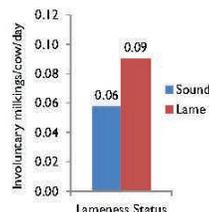
### Recent (2019) data from 75 herds in Ontario

- Clinically lame:  $28.3 \pm 11.7\%$  (Range: 10-66.7%)
- Severely lame:  $3.0 \pm 3.2\%$  (Range: 0-13.3%)

DAIRY  
GUELPH

Matson et al. 2022, J. Dairy Sci. 105:793-806

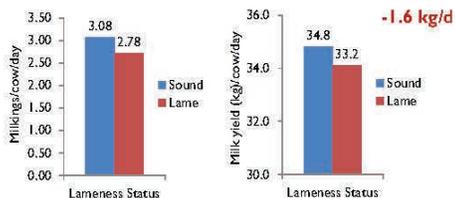
### Lame cows have more involuntary milkings ("Fetches") – 2.2x more likely



DAIRY  
GUELPH

King et al. 2017, J. Dairy Sci. 100:4818-4828

### Lame cows produce less milk...



DAIRY  
GUELPH

King et al. 2017, J. Dairy Sci. 100:4818-4828

### Recent (2019) data from 75 herds in Ontario

- Clinically lame:  $28.3 \pm 11.7\%$  (Range: 10-66.7%)
  - Every 5 percentage point  $\uparrow$  clinically lame cows =  $\downarrow$  1.0 kg milk/cow

DAIRY  
GUELPH

Matson et al. 2022, J. Dairy Sci. 105:793-806

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Optimizing Health and Production on Robotic Dairies

Trevor deVries, University of Guelph

### What is contributing to lameness on robotic farms?

- Mostly things that affect the standing and lying behavior of cows
  - Westin et al. 2016, King et al. 2017, Matson et al. 2022
    - Less lameness with...
      - Greater stall width
      - More lunge space
      - Deep, sand bedding
      - Lesser stocking density
      - More bunk space

SDU

DAIRY

PROBLEMS

### Sand was associated with 9.3 percentage point ↓ in clinical lameness vs organic bedding types

SDU

DAIRY

PROBLEMS

Matson et al. 2022, J. Dairy Sci. 105:793-806

### Sand was associated with ↑ 1.5 kg/d milk vs organic bedding types

SDU

DAIRY

PROBLEMS

Matson et al. 2021, J. Dairy Sci. 104:7971-7983

### Greater feed bunk stocking density = greater lameness prevalence

- Mean =  $68.7 \pm 21.1$  cm per cow
- For every 10 cm decrease in feed bunk space...
  - + 1.7 percentage point increase in clinical lameness

SDU

DAIRY

PROBLEMS

Matson et al. 2022, J. Dairy Sci. 105:793-806

### Having fewer clinically lame cows was associated with lower SCC

- Clinically lame: average =  $28.3 \pm 11.7\%$  (range: 10-66.7%)
  - Every ↓ 10 percentage point clinically lame cows = ↓ 23,400 cells/mL ( $P < 0.01$ )

SDU

DAIRY

PROBLEMS

Matson et al. 2022, J. Dairy Sci. 105:793-806

### What are the impediments to good health and welfare robotic farms?

- Poor udder health management

SDU

DAIRY

PROBLEMS

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Optimizing Health and Production on Robotic Dairies

Trevor deVries, University of Guelph

### Does udder health and milk quality have to be a concern in robotic scenarios?

- Risk of poor udder health and high milk bacteria counts are related to...
  - Host resistance
    - Stress and nutritional status
    - Proper teat disinfection
  - Environmental pressure
    - Hygiene - Bacterial loads (bedding)
    - Cow behavior patterns

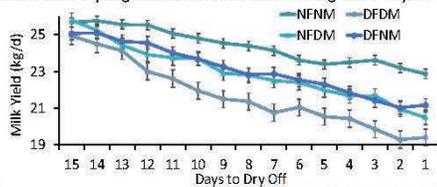
Matsen et al. 2021, J. Dairy Sci. 104:7971-7983

Sand was associated with less SCC ( $\downarrow 36,744$  cells/mL) vs organic bedding types

Matson et al. 2021, J. Dairy Sci. 104:7971-7983

### Opportunities in udder health management in robotic milking...

- Robots can be programmed to allow for more gradual dry off



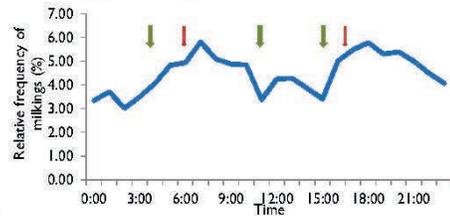
France et al. 2022, J. Dairy Sci. 105:3544-3558

### What are the impediments to good health and production in robotic farms?

- Improper nutritional management

France et al. 2022, J. Dairy Sci. 105:3544-3558

### Milking times are often linked to periods of PMR feeding activity...



Data adapted from DeNinno et al. 2013, Can. J. Anim. Sci. 93:427-433

Need to ensure feed is present when cows go to the bunk!

France et al. 2022, J. Dairy Sci. 105:3544-3558

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

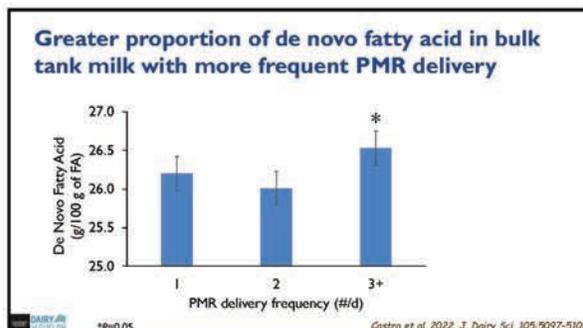
## Optimizing Health and Production on Robotic Dairies

Trevor deVries, University of Guelph

**Ensuring feed is available ensures cows are not limited in their consumption!**

- Feed needs to be consistently pushed up and available
  - 197 robot farms across Canada
    - Mean = 12.8 feed pushes/day (SD = 8.3)
    - For every 5 extra feed pushes...
      - +0.35 kg/d milk yield

Matson et al. 2021. J. Dairy Sci. 104:7971-7983



**Take home messages:**

- Robotic milking presents many opportunities for dairy producers
- Cow health and productivity are optimized in robotic system when you...
  - Ensure cows have time and space to milk voluntarily
  - Maintain good comfort, clean environments
  - Ensure continuous feed access and good nutritional management

DAIRY at GUELPH

**Thanks to our funders:**

Trevor DeVries tdevries@uoguelph.ca

## NOTES

---

---

---

---

---

---

---

---

---

---

---

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



it's all about the **milk.**



[www.dairylane.ca](http://www.dairylane.ca)    

**HiPro DDG Product**

**25% higher in natural protein**  
 This feed is rich in cereal and residual yeast proteins, energy, minerals, vitamins, and growth factors. Unlike traditional regular DDGS, the condensed solubles aren't added onto the Hi Pro DDG's, making this 25% higher in natural protein at 40% DM.

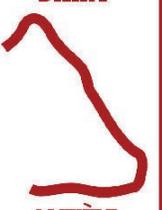
**To top it all off . . .**  
 This product is an excellent source of energy and other essential nutrients! This is a product you can't find anywhere else in Ontario.

**For more information, call:**  
 Colin Cavell (Feed Sales Representative)  
 519 994 1711 | [igpcfeeds@igpc.ca](mailto:igpcfeeds@igpc.ca)

 Located in Aylmer, Ontario, IGPC Ethanol Inc. contributes significantly to the Renewable Fuels Industry and Ontario's agricultural sector.

COLISEUM  
 presented by  
 HAN DEER  
 GENE

<b>CANADIAN</b>  <b>XPO CANADESE</b>	<b>DAIRY</b>  <b>LAITIÈRE ZUIVEL</b>	<b>XPO</b>  <b>CANADIENNE XPO</b>
---	---	--

**PRIDE IN DAIRY RECONNECTS**  
**APRIL 5-6, 2023**  
 Buy ticket at [Dairyxpo.ca](http://Dairyxpo.ca)

  
**WALLENSTEIN FEED & SUPPLY LTD.**  
*Feeding Success*



**Committed to Ontario's Dairy Industry**  
[www.wfs.ca](http://www.wfs.ca)  
 519-669-5143  
 1-800-265-8858

   **@WallensteinFeed**

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## How the Canadian Dairy Industry Can Become a Sustainable Source of Beef

Mike Steele, University of Guelph



**How the Canadian Dairy Industry Can Become a Sustainable Source of Beef**

Michael A. Steele  
Professor  
Department of  
Animal Biosciences

DAIRY  
at GUELPH

1

### Surplus Dairy Calves

- Calves that are not needed to produce milk
- ~5.2 million male dairy calves produced by Canadian and United States dairy industry in 2020
- In the EU, including the UK, about 11 million male dairy calves were produced by the dairy industry in 2020



Buller and van Kesteren, Chelitzky et al. 2021, Canadian Dairy Information Centre, 2020, USDA, 2020, AICB, 2020

2

### Surplus Dairy Calves

**Morbidity and Mortality**

- 5% mortality, 32% due to digestive disorders
- Mean age: 18.3 ± 2.3 d old
- 38% morbidity, 56% due to digestive disorders

**Immune Status**

- 24% of calves failed passive transfer

**Antibiotic Use**

- 26.8% of calves receive antibiotics
- 48.4% for digestive disorders

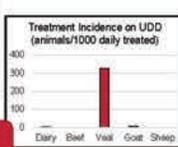


Shivley et al. 2018; Une et al., 2018; Renaud et al., 2020

3

### Key Challenges

1. Morbidity and Mortality
2. Antimicrobial Use
3. Housing and Nutrition



Catry et al. 2016; Santman-Berands et al. 2014

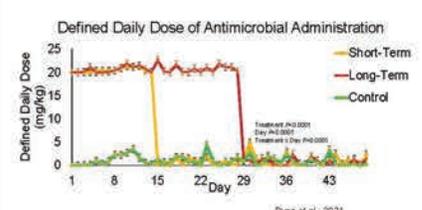
4



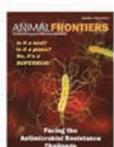
5

### Key Challenges

Defined Daily Dose of Antimicrobial Administration



Buss et al., 2021




6

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## How the Canadian Dairy Industry Can Become a Sustainable Source of Beef

Mike Steele, University of Guelph

### Key Challenges

1. Morbidity and Mortality
2. Antimicrobial Use
3. Housing and Nutrition

Remiel and Parizeau, 2022

7

### Key Challenges

Dairy producers say new transportation rules mean they will have to kill calves

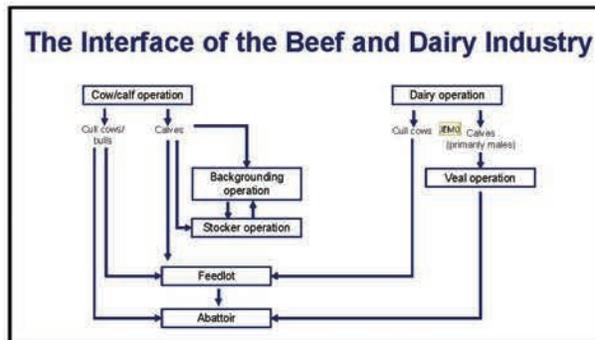
Young calves will have to travel 5 hours from farms within 12 hours of birth, past feed, water and rest

Dairy's 'dirty secret': it's still cheaper to kill male calves than to rear them

8

### Key Challenges

9



10

### The Emergence of Beef on Dairy

- Sexed semen & genomic testing –enough replacement heifers from only breeding best cows and heifers
- Smaller heifer inventory (slow quota growth, feed costs, \$ savings)
- Greater market value and access

11

### The Emergence of Beef on Dairy

Cross-bred calves sold through Quebec auction markets (< 125 lbs)

Year	Cross-bred (%)
2016	7%
2017	10%
2018	13%
2019	18%
2020	29%
2021	41%

12

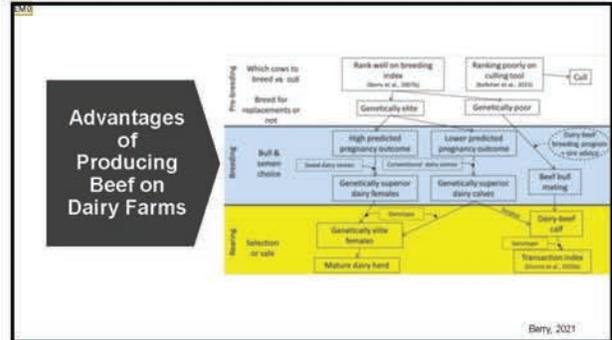
# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## How the Canadian Dairy Industry Can Become a Sustainable Source of Beef

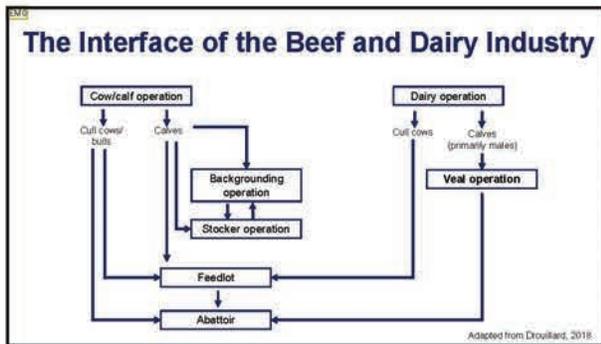
Mike Steele, University of Guelph



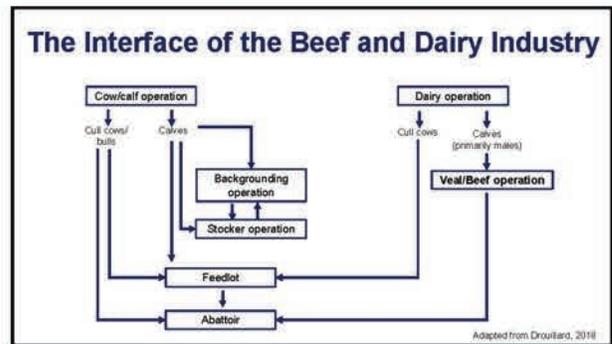
13



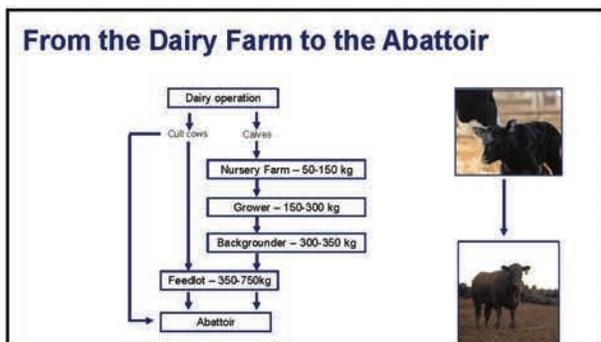
14



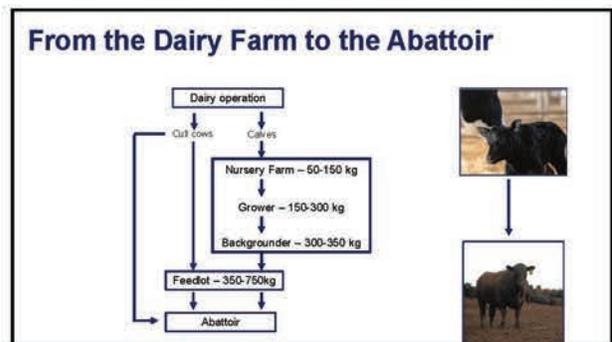
15



16



17

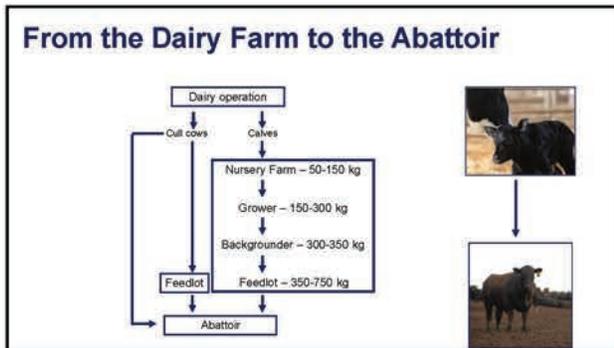


18

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## How the Canadian Dairy Industry Can Become a Sustainable Source of Beef

Mike Steele, University of Guelph



19

### Growth Characteristics

- **Holstein vs Beef**
  - Lower growth rates and feed efficiency
  - More maintenance costs
  - Longer days on feed
  - Large sex differences
- Liver abscesses are higher in Holstein

Berly, 2021

20

### Carcass Characteristics

Holstein are more tender and little difference exists between Holstein and Angus for taste preferences

Foraker, 2022

21

### Muscle Structure and Function

- **Holstein vs Beef**
  - Lower dress percentage
  - Smaller ribeye steaks
- Variability in muscle shapes in crossbreds

Foraker, 2022

22

### Where are the Competitive Advantages?

- Carbon footprint of Beef on Dairy**
  - Majority of greenhouse emissions in the beef industry are from the cow/calf sector
- Artificial insemination**
  - Enables rapid genetic progress
  - More opportunity to tailor to the market
  - Traceability and record
- Year-round supply to fill feedlots**

23

### “Early Life Programming”

“...early adaptation to a stress or stimuli that permanently changes the physiology and metabolism of the organism and continues to be expressed even in the absence of the stimulus/stress that initiated them...”

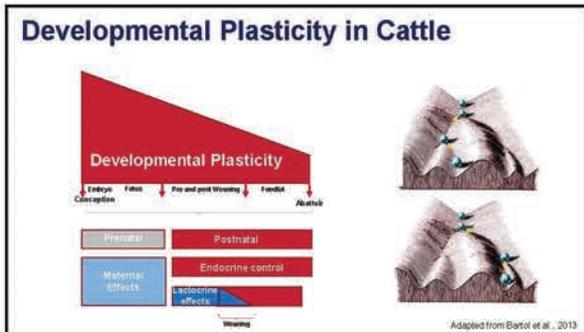
Patel and Srivansan, 2002  
Adapted from Conrad's Waddington epigenetic landscape

24

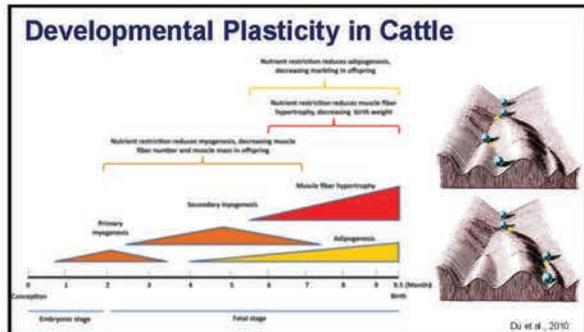
# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## How the Canadian Dairy Industry Can Become a Sustainable Source of Beef

Mike Steele, University of Guelph



25



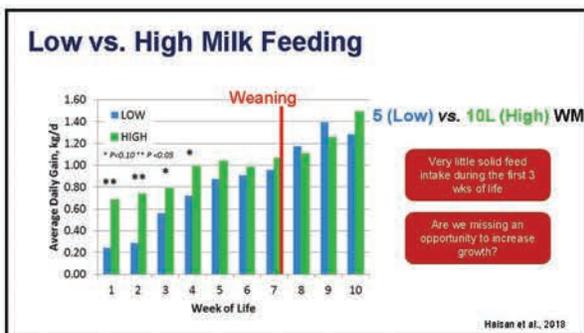
26



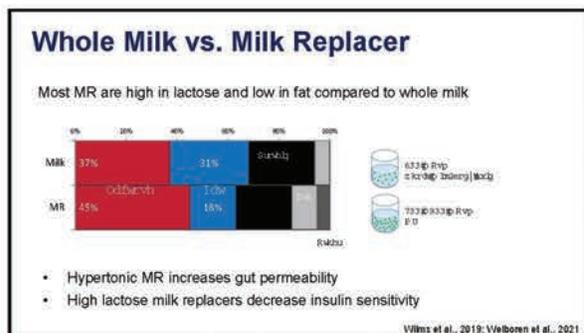
27



28



29

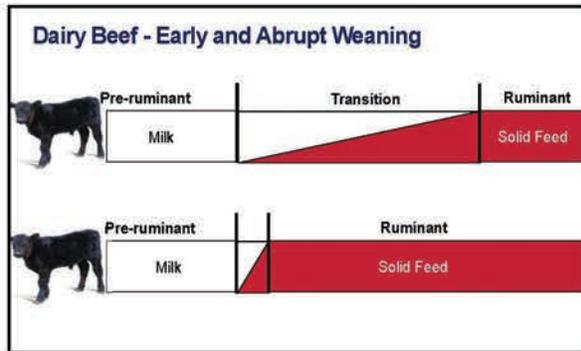


30

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## How the Canadian Dairy Industry Can Become a Sustainable Source of Beef

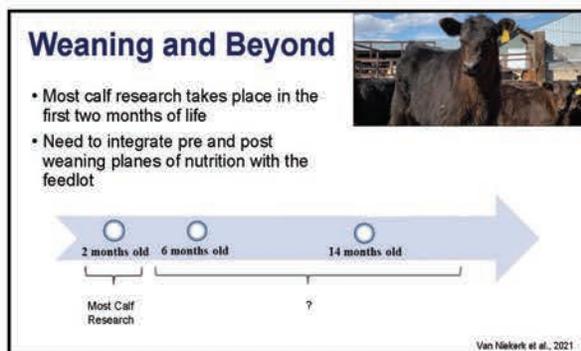
Mike Steele, University of Guelph



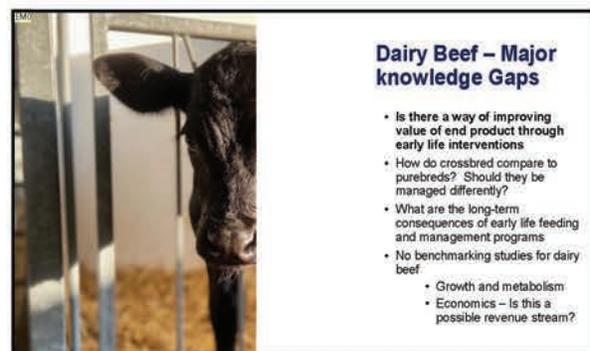
31



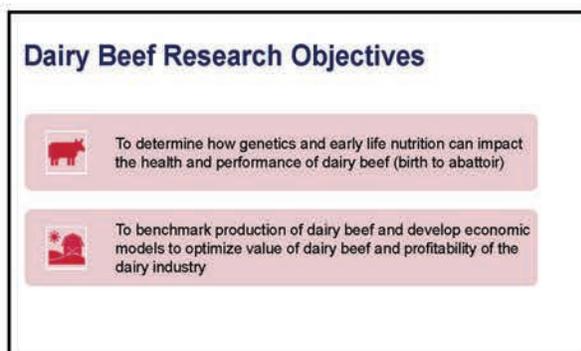
32



33



34



35



36



# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



**Labour Efficient and Cow Friendly  
Barn Design by Jack Rodenburg,  
Harold House and Nick Hiemstra**

[www.dairylogix.com](http://www.dairylogix.com)  
519-290-7194



**COWSIGNALS®  
BOOKS**





**LIQUID FEEDS INC.**  
ENHANCING RUMINANT HEALTH

*Promix is a blend of molasses, protein and other soluble carbohydrates. With solutions specific to your haylage to corn silage ratio used in the TMR:*

- > Palatable molasses-based feed
- > Provides sugar energy
- > Helps reduce sorting, increases dry matter intakes

**Promix**  
TMR SOLUTION

**1.800.265.8335**  
**LIQUIDFEEDS.COM**  
Box #237, Innerkip,  
Ontario NOJ 1M0



**FARM.FAMILY.PROUD.**  
A Canadian, family-owned  
corn & soybean company.

To learn more about our product line-up, contact  
Jacquie MacCormack  
Western Ontario Business Lead  
226-688-5857  
[jacquie.maccormack@horizonseeds.ca](mailto:jacquie.maccormack@horizonseeds.ca)



**FLORADALE  
FEED MILL LIMITED**

**Finest in Feeds and Service**

**SERVING THE  
AGRICULTURAL COMMUNITY**

Rations • Supplements • Base Mixes • Minerals/Premixes  
Commodity Blends • Bulk Grains & Proteins • Sound Nutritional  
and Management Advice Including Ration Balancing Services  
Farm Supply Store



519.669.5478 | 1.800.265.6126 |   | [ffmltd.com](http://ffmltd.com)

# ***SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM***

## **State of the Industry – Looking in the Mirror**

*Michael Barrett, Gay Lea*

Michael Barrett is the recently retired President & CEO of Gay Lea Foods Co-operative – the largest dairy co-operative in the Province of Ontario. Gay Lea Foods is a farmer-owned organization that provides nutritional bovine and goat dairy products to both the Canadian and international markets. Under his leadership, with multiple acquisitions and investments, Gay Lea continued its



growth trajectory returning profits back to our community, attaining in excess of a billion dollars in revenue. With 14 facilities across Canada, their commitment to rural sustainability and social responsibility is an ingrained value. Just prior to his retirement, Gay Lea announced the acquisition of Bothwell Cheese. Michael worked with Gay Lea Foods for over two decades and served eight years as President & CEO. Michael served in many different roles within Gay Lea Foods and within the broader co-operative sector both nationally and internationally. He is a governance “geek”. Michael also served his community by serving as a Trustee for the Durham District School Board representing the City of Oshawa for 19 years and held leadership roles on both the provincial and national level. Michael, in his spare time, besides helping to parent his now grown family of six children, grand parenting eight, likes spending time at his farm located in the rolling hills of Selwyn Township.

### ***Mississauga, Ontario, September 23, 2022***

The Board of Directors of Gay Lea Foods Co-operative Limited (“Gay Lea Foods”) announced today that President & CEO Michael Barrett has informed them of his intention to retire from the co-operative on January 31, 2023.

Michael Barrett has been with Gay Lea Foods for 22 years, serving as President & CEO since 2014. During his time as CEO, the Canadian co-operative has grown rapidly through several strategic acquisitions, including expansion into Western Canada, constructed the only nutraceutical-grade dairy ingredients facility in Canada, and made record investments to modernize and expand existing processing capacity and capabilities in Ontario, all while remaining humble to its rural Canadian roots and co-operative values.

“Gay Lea Foods has achieved remarkable growth over the last eight years thanks to the vision, leadership and team that Michael has built within and surrounding our co-operative,” says Board Chair Rob Goodwill.

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

State of the Industry – Looking in the Mirror

Michael Barrett, Gay Lea

# Gay Lea

BORN ON THE FARM

## About Gay Lea Foods

Gay Lea Foods is a leading Canadian co-operative renowned for their community-focused values and high quality, innovative, and award-winning dairy and food products. With members on more than 1,300 dairy farms across Ontario and Manitoba, their farmers, shareholders and employees have proudly collaborated for more than 60 years to *Enrich communities co-operatively*, ensuring the value the business creates flows to the members of their co-operative, their employees and the communities they touch.

Their dedication to innovation and the development of high-quality products has allowed them to respond to consumers' evolving tastes and grow the market for Canadian cow and, more recently, goat milk. They are a Canadian success story – and that story is far from over. Moving forward, Gay Lea Foods is poised to seize and create even more opportunities for sustainable, long-term growth in the Canadian dairy industry as they expand beyond our provincial borders, grow our foods and ingredients business, and continue to invest in innovative and industry-leading products.

As much as they evolve, however, they remain a dairy co-operative, owned by dairy farmers. From our farms and production facilities to our distribution networks and employee ideologies, they embrace and act with co-operative-inspired values, understanding there is no shortcut to quality or success. It takes commitment, passion and collaboration.

Those are the things they're made of and they're proud to share their story.

Just like the milk that comes from the farms, so too are Gay Lea Foods' products and values born on the farm.



[www.gayleafoodsmembers.com](http://www.gayleafoodsmembers.com)



[GayleaFoodsCooperativeMembers](https://www.facebook.com/GayleaFoodsCooperativeMembers)



[@gayleamembers](https://twitter.com/gayleamembers)

# ***SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM***

## **State of the Industry – Looking in the Mirror**

*Michael Barrett, Gay Lea*

### **Presentation Overview**

When the Marketing Boards were established in the mid-1960s and Supply Management established, the goal was to create a process by which production was planned to the end of eliminating the “boom-bust” cycle of dairy production. With the new system, it would create stability of income, stability of supply and protect a domestic market.

Advance more than five decades and is there a need to reflect on what is next for our industry? As an industry we face significant opportunities and hurdles in being able to determine what are the potential next steps in our pathway forward.

There is an old saying that says “Those who forget the lessons of the past are bound to repeat them”. Is there an opportunity to learn from the past to better plan the future?

From both a processor and a co-operative perspective, we will reflect upon the following four themes:

- **What are our strengths?**
- **Where are the weaknesses?**
- **What are the threats and trends that we will face?**
- **Where are their opportunities and what do we need to do to capitalize on those opportunities?**

What are some practical suggestions for where we need to take our collective industry to further strengthen our industry to ensure a sustainable, family led, and farmer-controlled industry? How do we utilize our voice to effectively leverage our vision?

Perhaps with a little bit of humour, probably with a little bit of history, certainly with provocative statements and viewpoints, let us explore and think.

One of my second-year professors at university told me once that the value of an education is not in the knowledge you gain but in “making you think.”

Perhaps he was correct.





# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



**solvet**  
Innovation By Request

In a world of calcium boluses  
**One Stands Out**

Cal-Boost is the Calcium bolus that stands out.

**Cal-Boost**  
Calcium-Vitamin D Bolus /  
Bulus de calcium-vitamine D

**Cal-Boost Features**  
The double application of a waxy coating for easy administration and protection for the esophagus from calcium chloride.

**Cal-Boost from Solvet is the Canadian calcium bolus.**

It started with research requested by Canadian veterinarians for the challenges their dairy herd customers were facing. It continued with research conducted in Quebec demonstrating that the convenient administration of 2 Cal-Boost boluses administered after calving are absorbed quickly to help elevate calcium blood levels when they need it. And Cal-Boost is also the only calcium bolus manufactured entirely in Canada to help ensure supply for Canadian dairy producers.

When you support Cal-Boost, you are supporting new product development and ongoing research done in Canada for the benefit of all Canadian Dairy Producers.

**Ask your veterinarian about Cal-Boost.**  
For more information, visit [solvet.ca](http://solvet.ca)

 I CARE FOR CATTLE

Solvet is a subsidiary of AVL Ltd. - I Care For Cattle logo is a trademark of Solvet/AVL.

**Engineer of the CFBA Dairy Award the Past 5 Years!**



Agriculture | Commercial | Residential | Biogas



**STONECREST**  
ENGINEERING INC.  
EST. 1995

440 Wright Blvd, Unit #2, Stratford, ON, N4Z 1H3  
Phone: 519-625-8025  
[www.stonecrestengineering.com](http://www.stonecrestengineering.com)

Find us on Social Media



@StonecrestEngineering




**Livestock & Poultry Supplier of:**






**the STARTline.**

- \* Specialty Feed Products
- \* Vitamin & Minerals
- \* Lacta-Fat™ liquid fat
- \* STARTline® including drySTART® (drying agent for livestock & poultry facilities)
- \* International Stock Food (ISF)
- \* Silo Guard® II Forage Additive (dry and liquid)

Providing Products to the Livestock Industry since 1983  
HACCP Certified since 1999 (First in Canada)  
Family owned company doing business with family principles

69819 London Rd, RR #1, Centralia, Ontario, Canada N0M 1K0  
Tel 519-228-6444 or 1-800-265-2904 • Fax 519-228-6560  
Email [kpalen@kenpal.on.ca](mailto:kpalen@kenpal.on.ca) • [www.kenpal.on.ca](http://www.kenpal.on.ca)

**KEENAN MechFiber+**

Less Horsepower  
More Consistent Feed  
Happier Herd



KEENAN MechFiber365+

SALES & SERVICE IN ONTARIO BY ONTARIO HARVESTORE  
(800) 265-8303 | [info@ontarioharvestore.com](mailto:info@ontarioharvestore.com)

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Breeding Strategies for Optimum Genetic Progress

Allison Fleming, Lactanet Canada



### Breeding Strategies for Optimum Genetic Progress

Allison Fleming<sup>1</sup>, Filippo Miglior<sup>2,3</sup> & Christine Baes<sup>2,3</sup>  
<sup>1</sup>Lactanet Canada, <sup>2</sup>University of Guelph, <sup>3</sup>University of Bern  
 Southwestern Ontario Dairy Symposium

1

### Genetic Selection Today

- Genetic selection in the dairy cattle industry has seen dramatic changes in recent decades
  - Introduction of **genomic selection** in 2009
  - Improved and novel technologies
- Increased popularity and usage of **young GPA bulls**
- Broadening of selection goals and number of traits evaluated
- Accelerated genetic gains** in most traits under selection
- In the genomics era, we also **need strategies and tools to help control some of the negative consequences** to ensure continued genetic progress

2

### Basics of Genomics

Phenotype



Phenotype: something (anything!) you can measure or observe

Genotype



Genotype: the animal's genetic information

Environment



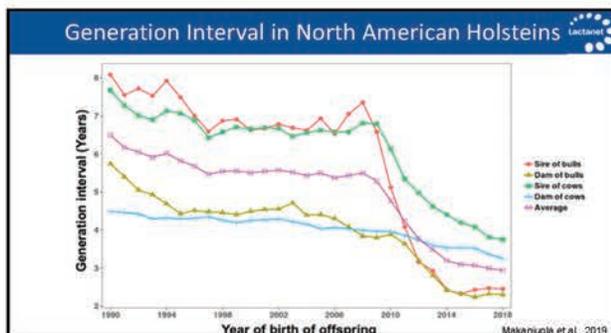
Environment: how the animal is fed, housed, managed, etc.

3

### Consequences of Genomic Selection

- Increased rates of genetic gain**
  - Increased accuracy of selection for young animals
  - Reduced generation interval
  - Ability to select for traits recorded in only few animals
  - Maintaining herdbook integrity
  - Management and discovery of recessives
- Cumulative benefits of genomic selection of **\$721 million / year**
- Homozygosity (inbreeding) is rising at an increased rate**
  - Increased occurrence of homozygous recessives (e.g. HCD, JNS, AM)
  - More subtle effects of inbreeding:
    - Reduction in phenotypic mean value and selection response
  - Potential future implications: **unknown**
  - Financial economic losses: **unknown** (estimate \$US 11 million / year, Cole et al.)

4



5



6

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Breeding Strategies for Optimum Genetic Progress

Allison Fleming, Lactanet Canada

### Pedigree vs Genomic Inbreeding

- The *coefficient of inbreeding* (Sewell Wright, 1922) is the probability that two base pairs at a randomly chosen position in the genome (*locus*) are *identical by descent*

**Pedigree Inbreeding**

- Classical measure of inbreeding, uses pedigree data and tracing it back to identify common ancestors between the sire and dam
- Formed on averages and are expectations
- Highly dependent upon completeness, depth, and integrity of available pedigree

**Genomic Inbreeding**

- Accounts for Mendelian sampling (chance factor in distributing half the genetic material) between individuals
- Captures realized inbreeding

7

### Pedigree vs Genomic Inbreeding

(Expectation) 25%      25%      (Mendelian Sampling) 0%

8

### Perspectives

**Industry Perspective**

a) I do everything I can to avoid inbreeding at all costs  
 b) I don't like to see an increase in inbreeding, but there's not much I can do  
 c) If it ain't broke, don't fix it.

**Public Perspective**

"...the gene pool is about as deep as a pie-plate"

**THE REAL STREET JOURNAL**

Must Dairy Cows Are Losing Genetic, and Scientists Are Worried!

**Academic Perspective**

The benefits of intense directional selection currently outweigh the detrimental effects of inbreeding, but there could be a threshold at which lack of genetic diversity causes serious problems.

We don't know when/if that would happen.

**★ Reality**

- Inbreeding is unavoidable in intense directional selection programs
- At best, we should **manage and monitor** the loss of genetic diversity

9

### Why Care?

- Short-term consequences:** as populations become smaller and less diverse, relative fitness decreases (i.e., survival and fertility)
- Long-term consequences:** lower gene diversity means less raw material for adaptations to changing environments, which may affect long-term survival

10

### Current Tools and Approaches

- Optimal Contribution Selection - Rarely used in practice
- Top lists dominate conversations / decisions / semen tanks
- "Outcrosses" interesting, but generally unpopular
- Experiments (cross breeding, etc.)

Two important decision points for maintaining genetic diversity in a population:

- The genetic diversity of young bulls purchased by A.I. companies
- The selection of sires when mating a female in your herd

11

### Lactanet Inbreeding Calculator

- Know the potential inbreeding for specific matings and avoid those above a tolerable level
  - E.g. maintain current inbreeding

POTENTIAL MATES	Potential Progeny's Inbreeding and Percent Averages													
	LP Code	NRR	LP	Peak	MLA	AVL	PROG	NP	NP	SCC	COFF	MS	HLA	OP
PEAR AU TANTHOND-ET	GRV	9.99	3656	3027	1775	93	86	+0.20	+0.16	108	9	7	5	7
WESTCOAST ALCOVE	GRV	13.62	8286	2648	2008	116	81	-0.31	-0.13	101	7	3	6	5
HARKNAR DELTA-LAMBDA-ET	GRV	13.09	3584	2789	1426	14	65	+0.19	+0.14	106	10	7	8	4
NO-FLA CAPITAL 4589-ET	GRV	8.88	5875	2719	1566	73	72	-0.27	-0.25	108	6	8	4	2
D-S-I PR RENEGADE-ET	GRV	9.46	6570	2775	1306	80	76	+0.37	+0.24	103	6	4	8	1
FUND TREB-I PURSAT	GRV	15.32	3560	2437	1440	96	71	+0.34	+0.18	103	7	4	8	4
OCQ BANDARIL CABERNET-ET	GRV	10.88	3330	2919	827	84	62	+0.12	+0.26	109	8	8	8	2

12

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

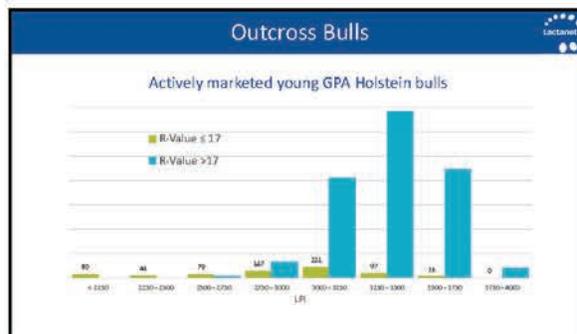
## Breeding Strategies for Optimum Genetic Progress

Allison Fleming, Lactanet Canada

### Outcross Bulls

- **R-value** (Relationship-value), which represents the percentage of DNA that the bull has in common (i.e. its genetic relationship) with active females of the same breed
- Difficult to find outcross sires of interest with high genetic merit
  - Little advantage for A.I. companies to buy more outcross sires, which normally come with a lower genetic offering
  - Poor demand for their semen

13



14

### Within Herd R-values

- Current R-values are on a population level
  - The relationship with animals in a specific herd could be very different
  - A bull may be outcross to one herd but not another
- Need herd specific solutions and tools to make it easier to find diverse bulls

★ Working toward within herd R-values to provide lists of "diversity" bulls specific to a herd

15

### Genetic Recessives and Abnormalities

- Genomics has aided in the discovery of genetic recessives, but we are also seeing higher occurrences
- Gene testing and management of genetic recessives
  - Avoid carrier bulls and never mate two potential carriers
- Need improved reporting of abnormalities and deaths to discover these as early as possible
  - **Will be working with industry partners to develop an improved method for easy reporting and rapid responses**

16

### Genomic Solutions

- Move toward looking at **genomic inbreeding or realized** instead of traditional pedigree-based inbreeding
- Future tools should take advantage of genomic information to identify sires to use within a genotyping herd
  - Where both sire and dam are genotyped, genomic relationships can be used **more accurately** than pedigree relationships
- **Not all inbreeding has a negative effect on performance**
  - Sire selection advice can include genomic information for finding complementary genotypes and avoid negative effects of homozygosity

17

### Future Tools

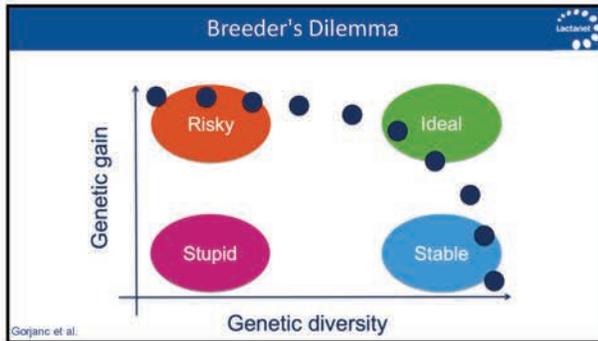
- What future services would help Canadian farmers **manage/maintain** genetic diversity?
  1. Include genomic information where possible for more accurate measures of relatedness
  2. Provide a within-herd tool for producers to see which bulls are LEAST related to their herd
  3. Develop other tools to help A.I. companies identify and purchase "Diversity" sires after genotyping new young bull candidates
  4. Tool to ease the reporting of genetic abnormalities
  5. Continue research using new technologies to further understand (biological, economic, societal, etc.) impacts of homozygosity

18

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Breeding Strategies for Optimum Genetic Progress

Allison Fleming, Lactanet Canada



19

The slide titled "First Steps" contains the following bullet points:

- Inbreeding levels are increasing and this increase is **unavoidable**
  - Many consequences of inbreeding are still unknown
- Balance genetic gain with increases in inbreeding levels
  - Look for or ask about bulls that would be **outcross** to your females
- Gene testing and management of genetic recessives
- **Genotyping females** will provide more information about the current status of inbreeding
- **Continue genomic selection** for traits related to reproduction, fitness, survival, etc.

A box at the bottom states: "The approach forward involves industry collaboration, but someone needs to make the first move!"

20

The slide titled "2 Critical Decision Points Affecting Diversity of Dairy" features an egg on the left and a chicken on the right, connected by two orange arrows pointing in opposite directions. Below the egg is a blue box with the text "What bulls do AI companies purchase?" and below the chicken is a blue box with the text "What semen do producers purchase?"

21

The slide features a laptop on the left with a person icon and a graph on its screen. To the right, the text reads: "#LactanetOIS February 23, 2023 REGISTER NOW!". At the bottom, it says "Genetics" and includes the Lactanet logo.

22

## NOTES



**PIONEER**<sup>®</sup>

**CORTEVA**<sup>™</sup>  
agriscience



At Farmtario we give you the news and information critical to making better decisions on your farm.

We understand **▶ WHY IT MATTERS** and tell you that in each article, for the most efficient reading experience.

Make Farmtario your first choice in agriculture news. We're everywhere you are: online, on your phone, on social media, in your inbox and in your mailbox.

**Farmtario**  
farmtario.com / Growing Together

 @Farmtario
  @farmtario



**EMBRO**  
FARM SYSTEMS  
EMBRO, ONT. N0J1J0




**"Committed to Customer Service"**  
Call Us Today at (519) 423-9595

## RESOLTZ<sup>®</sup> NEONATE PASTE

*Egg protein in complexes, a factor in the maintenance of good neonatal health*

**Resoltz<sup>®</sup> Neonate Paste** is a palatable feed supplement for newborn calves, containing egg proteins in complexes. Resoltz<sup>®</sup> Neonate Paste comes in a 35 mL single-dose oral syringe for easy dispensing.

Product code: PAH-081



**Embrace THE POWER OF EGG<sup>™</sup>**

**TO ORDER:**  
Toll Free: 1-866-690-4998  
www.partneranimalhealth.ca



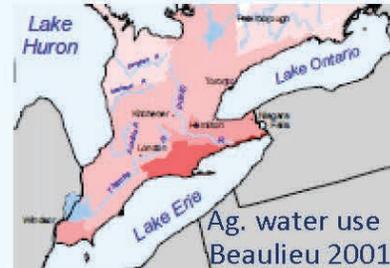
## Water Use in the Dairy Industry

Andrew VanderZaag, AAFC

### Why is water use important?

- Dairy sector sustainability goals: conserving resources, stewardship.
- Livestock water use is ~30% of Ontario agricultural water use.
- Ensuring water supply during droughts.
- Cost to treat water, haul excess water in manure.

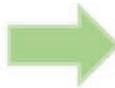
Ontario has ample fresh water, but some regions withdraw over 40% of recharge.



The International Dairy Federation defined **two types of water use**: 1) **Water Consumption** is when water leaves the watershed (e.g. in milk, evaporation), and 2) **Water Degradation** is when water quality decreases as a result of an activity.

### Indirect

Feed  
Electricity  
Fertilizer



### Direct



#### Did you know? Indirect water use

associated with concentrates, electricity generation, etc. are typically larger than **direct water use** in the barn. Indirect water is significant to the dairy sector overall. Reducing inputs has water benefit.

**Water Quality** is just as important as reducing direct water use. This includes:

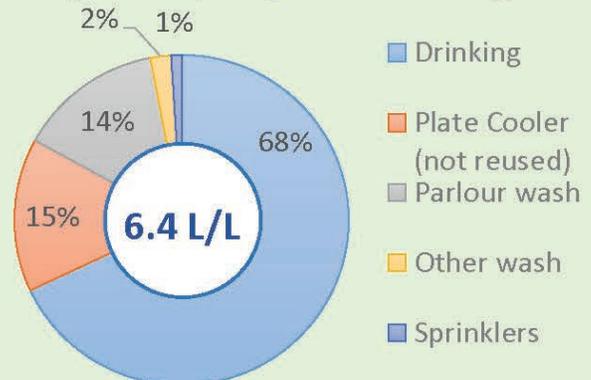
- Appropriate manure storage capacity.
- Ensuring milkhouse washwater is treated in an approved system.
- Minimize runoff from around the farm.
- Collect and manage silage seepage.
- Use 4R practices for manure and fertilizer applications.

### Small changes add up:

If every dairy farm in Ontario reduced direct barn water use by 1%, it would save over 180 million L of water per year.

### How water is used in the barn

(one farm, one year of monitoring)



### Opportunities to conserve

1. **Re-use.** Plate-cooler water should be reused. In this case the reservoir was too small causing overflow. Milking system and bulk-tank wash can be re-used for floor wash.
2. **Reduce.** Check for leaks and overflowing bowls. Consider scraping floors before washing or alternatives to tip-troughs. Standardize cleaning procedures.
3. **Cows.** Cooler cows need less drinking water. Ventilation, shade, sprinklers help.
4. **Measure.** Every farm is different, tracking your own water is best to manage it better.
5. **Manure.** Some farms add water to manure to make it easier to pump. Consider high solids pumps, solid-separator, or using rainwater from the roof.



**OUR SALES NUMBERS ARE  
NO BULL.**

**38,000**  
Acres Sold\*



**742**  
Farms Sold\*



**4015**  
KG Quota Sold\*



**Selling? We Know Dairy.**

**RE/MAX FARM ONTARIO** Call our team of experts!  
**519-667-1800**  
**FarmOntario.com**

Southern Ontario:  
Call Phil Spoelstra\* & Ron Steenberg\*  
 Eastern Ontario:  
Call Arjan Leeuwerke\*

**SUPPORT YOUR DAIRY PRODUCTION REQUIREMENTS**

BYPASS SOYBEAN MEAL  
 SODIUM BUTYRATE  
 RP AMINO ACIDS  
 BETAFIN  
 DCAD

**HALCHEMIX**  
[www.halchemix.ca](http://www.halchemix.ca)

**promat**

*The Leader in  
Animal Comfort*

Working together to build a stronger community.

At South Easthope Mutual, our policyholders are our members. That's what keeps us strong!

Your needs and your goals are our priority. So when you succeed, we succeed.

That's why after 150 years, South Easthope Mutual is still here for you - today and tomorrow.

**FARM HOME AUTO BUSINESS**

**se MUTUAL** **SOUTH EASTHOPE MUTUAL INSURANCE**

Working together for insurance that works.  
 1-800-263-9987 - [www.southeasthope.com](http://www.southeasthope.com)

# **SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM**

## **THANK YOU TO OUR EXHIBITORS**

### **ABS Canada**

[www.absglobal.com/ca](http://www.absglobal.com/ca)  
1-888-783-7885

### **Agri-Nutrient Solutions Inc.**

[www.agrinutrientsolutions.com](http://www.agrinutrientsolutions.com)  
519-500-8871

### **Agri-Plastics/Agri-Comfort**

[www.agri-plastics.net](http://www.agri-plastics.net)  
905-945-3116

### **Agri-Trac Inc.**

[www.agri-traction.com](http://www.agri-traction.com)  
1-877-966-3546

### **Avonbank Inc.**

[www.avonbank.ca](http://www.avonbank.ca)  
519-418-2507

### **Ayr Farmers Mutual Insurance Company**

<https://www.ayrmutual.com>  
1-888-279-1334

### **B-W Feed Supply Ltd.**

[www.bwfeed.ca](http://www.bwfeed.ca)  
519-662-1773

### **Bioret Agri**

[www.bioret-agri.com](http://www.bioret-agri.com)  
519-320-0902

### **Bluewater Pipe Inc.**

[www.bluewaterpipe.com](http://www.bluewaterpipe.com)  
226-425-2111

### **BMO**

519-535-2536

### **Bobcat of Brantford**

[www.bobcatofbrantford.com](http://www.bobcatofbrantford.com)  
519-752-7900

### **Britespan Building Systems**

[www.britespanbuildings.com](http://www.britespanbuildings.com)  
800-407-5846

### **Brodie Ag & Industrial Inc.**

[www.brodie-ag.com](http://www.brodie-ag.com)  
519-242-4147

### **Burgessville Grain & Feed Inc.**

[www.burgessville.ca](http://www.burgessville.ca)  
519-424-2147

### **Canadian Dairy XPO**

[www.dairyxpo.ca](http://www.dairyxpo.ca)  
519-362-4480

### **Canarm AgSystems**

[www.canarm.com](http://www.canarm.com)  
519-848-3910

### **Cargill Animal Nutrition (Purina)**

[www.agripurina.ca](http://www.agripurina.ca)  
1-800-265-0381

### **Choice Seeds Inc.**

519-878-3728

### **CIBC**

[www.CIBC.com](http://www.CIBC.com)  
1-800-465-2422

### **Dairy Lane Systems Ltd.**

[www.dairylane.ca](http://www.dairylane.ca)  
519-666-1404

### **DairyLogix**

[www.dairylogix.com](http://www.dairylogix.com)  
519-290-7194

### **Dairymans Choice**

[www.dairymanschoice.ca](http://www.dairymanschoice.ca)  
1-800-420-3633

# **SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM**

## **THANK YOU TO OUR EXHIBITORS**

### **De Dell Seeds**

www.dedellseeds.com  
519-264-2676

### **Dortmans Bros. Barn Equip. Inc.**

www.dortmansbros.com  
519-247-3435

### **EastGen**

www.eastgen.ca  
1-888-821-2150

### **Ecostrat Inc.**

www.ecostrat.com  
416-968-8884

### **Energrow**

www.energrow.com  
1-844-363-7476

### **Farm Ontario (Re/Max)**

www.farmontario.com  
519-667-1800

### **Farm Power Inc.**

www.farmpowerinc.ca  
519-582-3800

### **Farmers Depot**

www.farmersdepot.ca  
1-866-527-6229

### **Farmtario**

www.farmtario.com  
905-517-0499/204-954-1400

### **FCC**

www.fcc.ca  
1-888-332-3301

### **Foerster-Technik N.A.**

www.foerster-technik.com  
519-239-9756

### **FloChem Ltd.**

www.flochem.com  
519-763-5441

### **Floradale Feed Mill Limited**

www.ffmltd.com  
519-669-5478

### **Furst-McNess Company of Canada Ltd.**

www.mcness.com  
1-800-363-9988

### **Gay Lea Foods**

www.gayleafoodsmembers.com  
800-268-0508

### **General Seed Company**

905-648-2101

### **GJ's Harvest Centre**

www.gjharvestcentre.com  
519-242-9374

### **Grand River Robotics**

www.grobotics.ca  
226-383-7678

### **Grand Valley Fortifiers**

www.grandvalley.com  
1-800-567-4400

### **Grandview Concrete Grooving Inc.**

www.cowcomfort.com  
1-888-447-6684

### **Grober Nutrition Inc.**

www.grobernutrition.com/  
519-622-2500

### **Halchamix Canada Inc.**

www.halchemix.ca  
905-982-2781

# **SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM**

## **THANK YOU TO OUR EXHIBITORS**

### **Harco Ag Equipment**

www.harcoag.ca  
519-338-2923

### **Honeyland Ag Services**

www.honeylandag.com  
226-377-8485

### **Horizon Seeds Canada Inc.**

www.horizonseeds.ca  
519-842-5538

### **IGPC Feeds**

www.igpc.ca  
519-765-2575

### **Jake's Welding Inc.**

www.jakesweldinginc.com  
519-468-3676

### **JEFO Nutrition**

www.jefo.ca  
450-799-2000

### **Jones Feed Mills Ltd.**

www.jfm.ca  
519-698-2082

### **Knoops Farm Service Inc.**

519-475-4381

### **Lactanet**

https://lactanet/en/home/  
1-800-549-4373

### **Lamers Silos Ltd.**

www.lamerssilos.ca  
519-485-4578

### **Libro Credit Union**

https://www.libro.ca/business/farms-  
agri-business/  
519-672-0130

### **Liquid Feeds Inc.**

www.liquidfeeds.com  
1-800-265-8335

### **Mapleview Agri Ltd.**

www.mapleviewagri.ca  
519-638-3769

### **Masterfeeds Canada**

www.masterfeeds.com  
1-800-707-4779

### **McFarlan Rowlands Insurance Brokers**

www.mcfarlanrowlands.com  
888-734-8888

### **Nafico Distribution Inc.**

www.nafico.ca  
1-855-562-3426

### **National Bank of Canada**

https://www.nbc/business/banking/se  
ctors/agribusiness.html  
416-507-9158

### **Nature Feed Centre**

www.naturefeedcentre.ca  
519-424-2540

### **Ontario Ministry of Agriculture, Food & Rural Affairs**

https://www.ontario.ca/page/rural-  
and-north  
1-877-424-1300

### **Ontario Soil & Crop Improvement Assoc.**

www.ontariosoilcrop.org  
1-800-265-9751

### **Performance Dairy Centre**

www.performancedairy.ca  
519-423-9119

# **SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM**

## **THANK YOU TO OUR EXHIBITORS**

**Phibro Animal Health Corporation**  
www.pahc.com  
519-830-5171

**Pioneer Hi-Bred Canada Company**  
www.pioneer.com/ca.en  
519-352-6350

**PrevTech Innovations**  
www.prevtech.ca  
1-888-224-0604

**Progressive Dairy Operators**  
www.pdo-ontario.ca  
519-515-9956

**Promat**  
www.promateinc.com

**Protekta**  
www.protekta.com  
1-888-822-3135

**Quality Seeds Ltd.**  
www.qualityseeds.ca  
1-877-856-7333

**R. M. Matheson Farms Limited**  
www.rmmathesonfarms.com  
519-870-6210

**Robert J. Morris Insurance & Consulting Ltd.**  
www.rjmorris.ca  
519-283-6608

**Rombouts AG Services Inc.**  
www.romboutsag.com  
519-425-0206

**Royal Bank of Canada**  
<https://www.rbcroyalbank.com/business/advice/industry-expertise/agriculture/index.html>  
1-888-618-7049

**Safeguard Biosystems**  
519-836-6945

**Scotiabank**  
www.scotiabank.com  
226-228-6127

**Semican**  
www.semican.ca/en  
1-866-736-4226

**Serval Canada**  
www.servalcanada.com

**Silo-King / Agri King Inc.**  
519-577-6893

**SiloKing Canada**  
www.silokingcanada.com  
519-269-3300

**Solvat**  
www.solvat.ca  
1-877-456-2755

**South Easthope Mutual Insurance Company**  
www.southeasthope.com  
1-800-263-9987

**Stonecrest Engineering Inc**  
www.stonecrestengineering.com  
519-625-8025

# **SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM**

## **THANK YOU TO OUR EXHIBITORS**

### **Stratford Farm Equipment**

www.sfe-sales.com  
519-423-6264

### **Sun-North Systems Ltd.**

www.sunnorth.com  
519-527-2470

### **TD Canada Trust**

www.td.com  
226-979-2855

### **Tirecraft Ontario Inc.**

519-424-3402

### **Trillium Mutual Insurance**

www.trilliummutual.com  
1-800-265-3020

### **Trouw Nutrition Canada / Shur-Gain**

<https://www.trouwnutrition.ca/en-ca/>  
519-823-7000

### **UdderlySAFE**

<https://www.peoplemanagementgroup.com>  
519-532-2508

### **Ukal Canada Inc.**

www.ukalcanada.com  
1-800-665-8389

### **Vandenburg Equipment Service Ltd.**

www.vesontario.com  
519-863-5719

### **Veal Farmers of Ontario**

www.vealfarmers.ca  
www.calfcare.ca  
519-824-2942

### **Veldale Farms Ltd.**

www.veldalefarms.com  
519-456-7333

### **Vetoquinol**

www.vetoquinol.ca  
519-560-7325

### **Wallenstein Feed & Supply Ltd.**

www.wfs.ca  
1-800-265-8858 / 519-669-5143

### **WeCover**

www.wecover.net  
519-692-9900

### **Zehr Insurance Brokers**

www.zehrinsurance.com  
519-595-8108

### **Zuidervaart Agri-Import Ltd.**

www.zuidervaartagri.com  
519-393-8290

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



## ONE DAY YOU'LL MARVEL AT HOW FAR YOUR FARM HAS COME.

A silhouette of a person stands in the doorway of a large barn, looking out into the bright light. To the left of the person is a white sign with a red gear icon and the text 'BRING ON THE DAY' in red and black, with a small Purina logo at the bottom.

Want to see how far you can take your operation?  
Contact your local Purina Dairy Advisor today.

The Purina logo, featuring a blue square with a white house icon and a red and white checkerboard pattern, with the word 'PURINA' in red below it.

PURINA® and the Checkerboard design are licensed trademarks of Nestlé Purina PetCare Company



**Deanna Ringelberg**  
Relationship Manager  
Agriculture Services

The TD logo, consisting of the letters 'TD' in white on a green square background.

**TD Canada Trust**  
114 Huron Street  
New Hamburg, Ontario N3A 1J3  
T 226 388 4006  
deanna.ringelberg@td.com

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



## Supporting agriculture for over 75 years

Libro Credit Union is proud to support farmers and agri-businesses in southwestern Ontario. Libro is a full-service financial institution, with an expert agricultural and commercial team to meet all your banking, borrowing and investing needs, right here in our community.

Talk to Libro Coach today!

[libro.ca/ag](http://libro.ca/ag)  
1-800-361-8222



Let's make money better.

Operating Accounts • Loans • Mortgages • AgriInvest • Visa

# mw&co.

chartered professional accountants



# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## FOOD FROM OUR FARMS . . . . AND FOOD FOR THOUGHT ABOUT MARKETING

2023 marks the 17th year of featuring dairy products selected to help us “learn from lunch”. While many of our products are a continuation of themes we have looked at in the past, some are completely new. The products so graciously provided by your industry partners in the processing sector offer not just “food” but also “food for thought”. It is our hope that these products and the information presented about them will increase awareness and stimulate interest among producers in the marketing side of the industry. We salute these products and the companies behind them as opportunities to expand markets, add value and strengthen the industry.

While traditional messages around the essential nutritional importance of milk are faltering, we salute our line up of 2013 products for presenting “**Dairy and Health**” in a new light.

With health as our focus, we salute **Chapman’s Ice Cream** for its leadership in developing products that address allergies and other health issues. The link, prominently featured on their website homepage, takes you to a wide variety of products that are **gluten free, egg free and lactose free. Nut free products** allow the nearly 500,000 Canadians with peanut and tree nut allergies to enjoy Chapman’s products, and the country’s 2.5 million diabetics can enjoy their great tasting, **no sugar added** ice cream with less guilt and more pleasure.

**fairlife milk** is processed in Peterborough and sold across Canada. It is high time producers get on board promoting this all Canadian blue cow beverage. With **double the protein, half the sugar, and lactose free**, fairlife concentrates the goodness of milk. It takes 2 litres of milk to make 1 litre of fairlife, so even accounting for substitution, market growth for this product is a growth opportunity for the dairy industry.

The yogurt industry has long focussed on the benefits of probiotics and they offer lactose and sugar free as well, but **Modhani Yogurt** takes healthy eating a big step further. Their Greek style fruit bottom yogurt includes **turmeric**, a tasty spice that has unique benefits. Research studies support that curcumin, the active ingredient in turmeric, helps reduce inflammation and symptoms of osteoarthritis and rheumatoid arthritis. It may even prevent the growth of certain kinds of tumors, Alzheimer’s disease, stomach ulcers, and high cholesterol. You can buy Modhani in grocery stores in the Toronto area, and in line with the latest food marketing trend, you can buy it online. Since this unique dessert is made by a small family-owned company, we got it at a reduced price rather than full donation. **De Dell Seeds**, another small, family-owned business, who has a unique new healthy corn silage variety called “Dessert”, has sponsored this product and it is available for sampling beside their exhibit booth.

For some, “organic” is strongly linked to **health** as well as **sustainability** and in recognition of this important piece of the market, we try to include some organic products every year. We thank **Harmony Organic Dairy** for donating our coffee cream and we salute them for helping markets grow by responding to the needs and wants of consumers.

While we won’t look for a health angle for **VodKow**, we have certainly found one for **Dairy Distillery** and we salute them for their role in providing **alcohol-based hand sanitizer** during the Covid crisis. While this is still in their product line, we are glad they can again re-focus on making their unique vodka from a low value, milk processing by-product called milk permeate. They also market even more dairy with their excellent line of **cream liqueurs made with Canadian cream**.

# ***SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM***

While cheese is nutritious and healthy, we chose our cheese selection this year for a different reason. Gay Lea Foods is a leading-edge dairy cooperative that gives producers a valuable place in the processing sector. Its recently retired CEO Michael Barrett is our featured speaker this year. Michael Barrett has been with Gay Lea Foods for 22 years, serving as President & CEO since 2014. During his time as CEO, the Canadian co-operative has grown rapidly through several strategic acquisitions including expansion into Western Canada, constructed the only nutraceutical-grade dairy ingredients facility in Canada, and made record investments to modernize and expand existing processing capacity and capabilities in Ontario, all while remaining humble to its rural Canadian roots and co-operative values. A big piece of Gay Lea's growth has been in cheese and we salute Michael today by featuring a selection of cheeses from **Salerno, Thornloe, Black River, Alberta Cheese, and Bothwell Cheese** which were all acquired during Michael's nine years at the helm.

On the subject of cheese, your Dairy Symposium team wants to foster and promote dairy industry growth in all that we do. We want to thank all of our speakers with a gift and we choose to give dairy. **Cheese baskets** like those offered here are available from a long list of local cheese processors in the region and we thank **Scotiabank** for generously sponsoring the purchase of six baskets for speakers and two for early bird draws. Christmas is still far away, but we urge you to take pride in our industry and give dairy products to friends, employees and those who need a thank you any time of the year.

Last but not least, we want to remind you that our farms produce other foods in addition to dairy products. This year we are serving **veal on a bun** to acknowledge our veal producers, who we rely on to market **bull calves and surplus heifer calves** as premium quality veal products. A big thank you goes out to **Highland Meats** who have subsidized our veal purchase with a reduced price.

Have a look at the following pages for a message from the veal association about how we can market our "product" to them in a way that maximizes value for them and for the end consumer. We have also pulled some information from the websites of these valued partners in the processing sector.

These processors are adding new dimensions to our dairy industry and reconnecting the consuming public with the dairy farm in ways that will help us move towards greater sustainability. Our supply management system depends on the support of government and ultimately on the support of the public and consumers. Working together and building relationships with all of our partners along the supply chain is an important part of securing our future.

Marketing is everyone's business . . . and we hope that we have stimulated your appetite, both for these innovative dairy products themselves and for the cooperative marketing approaches that our industry needs to expand the marketplace. We also hope that after the meeting, you will make a point of buying and enjoying the products we served today, at your own kitchen tables, in the interest of a bigger and stronger Canadian dairy industry.

Jack Rodenburg, on behalf of the Planning Committee.



## A Message from the Veal Producers

While a number of factors that influence the price of male dairy calves are out of your hands, there are a few areas dairy calf producers can focus on to maximize the quality and value of the calves they are selling.

Pricing for veal is cyclical. September to December is the strongest market for finished grain-fed veal cattle, which means greater demand for male dairy calves seven to eight months ahead of that time as veal producers fill barns to target that market, and softer

demand with diminished pricing for animals that will be marketed through the spring holidays, when processing capacity is diverted to other proteins.

Knowing those are two key markets for veal production, dairy calf producers should look ahead at the time of breeding for an idea of which market the animals will be ready in – different markets have different needs, and there is opportunity in breeding specifically for the veal market. Holstein male calves are leaner, streamlined, taller animals, but veal producers need blockier, stockier builds which is what helps put finish on the animal. Genetics play a part in this, not just their feeding program, and packers appreciate the consistent conformation of the Holstein male animals arriving for veal processing.

The veal sector is also striving for responsible antimicrobial stewardship and reducing use, which means calves must be stronger and healthier when they arrive at the veal farm. Ensuring all calves on the farm receive four litres of high-quality colostrum within six hours of birth, and their first feeding as soon as possible, will improve passive transfer of immunity. Male dairy calves leaving the farm are commingled at a young age before their immunity kicks in. Stress from transport can also reduce immunity and leave the calves more susceptible to disease, making excellent colostrum management essential for every calf on the farm. Learn more at [calfcare.ca](http://calfcare.ca).



Thank you to Highland Packers for their support in providing partial sponsorship for the veal on a bun served at the Dairy Symposium. This family business started by the DeJonge family in 1958 includes meat packing, as well as retail. It has a strong focus on local foods including the freshest meats and deli items, cheese and other dairy products and fruits, vegetables and baked goods.

# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM

## Gay Lea



## salerno



Gay Lea Foods Cooperative topped \$1 billion in sales in 2022, in part through the acquisition of well respected and popular cheese processors in Ontario and Western Canada, under the leadership of Michael Barrett. The cheeses featured at our Dairy Symposium, are donated by these popular brands which are all part of the Gay Lea family.

fairlife® ultra filtered milk has 50% less sugar and 50% more protein than regular milk. It's also lactose free and has 9 essential nutrients plus delicious taste.



We worked diligently for over two years to build our new \$85 million plant in Peterborough, Ontario and we proudly use 100% Canadian milk in our fairlife® ultrafiltered milk products, and we feature the Dairy Farmers of Canada blue cow logo on our packaging.



# SOUTH WESTERN ONTARIO DAIRY SYMPOSIUM



At Chapman's, we take our allergen free products seriously so that you can relax and enjoy a delicious frozen treat regardless of your dietary needs.

We're proud to be recognized as an industry leader in offering innovative, safe and delectable frozen treats with our wide selection of peanut free, nut free, gluten free, lactose free, and no sugar added options. Most of our products are also egg free and sulphite free, and we don't use any mustard, sesame seed, fish, or Crustacean products.

We built a dedicated nut free facility and use carefully selected suppliers and test our products throughout the production process and prior to leaving our factory.



Modhani Herbs and Spice Yogurt is a family owned company started in Brampton in 2015. It

started with a dinner table idea to harness the health benefits of turmeric. When someone is unwell, a warm glass of steamed milk with turmeric can be useful. A wound can be healed with a turmeric paste. From this, we decided to help others with this innovative idea. At Modhani our products are authentic and true. Further, we believe in working to make a difference in the world. With your help, we can donate 10% of our profits to charities.



# THE 38<sup>th</sup> ANNUAL

Our Premium Organic 10% Half & Half Cream is the perfect match for your favourite hot beverage.



Not only does it have that farm fresh taste, this product comes to you from cows treated with love and respect. It is packaged in an environmentally-friendly returnable glass bottle to be cleaned and refilled.

Ingredients: Organic skim milk, organic cream



Check our website at [www.harmonyorganic.ca](http://www.harmonyorganic.ca) to learn more about our products and about these symbols of quality.

## Dairy Distillery Vodkow



At Dairy Distillery, innovation, is at the heart of what we do. So is a deep desire to champion our community and the environment. We've married artisanal distilling techniques with cutting edge science to transform unused milk sugar into an incredibly smooth and clean spirit. In doing so we create new opportunity for dairy farmers while reducing waste. We craft great spirits that do good.

A portion of the milk from 3,500 Ontario dairy farms is separated by processors into cream to make butter and milk protein concentrated to make ultrafiltered milk used by cheese and yogurt makers. The third component is a sugar rich liquid called milk permeate which is usually surplus and is often dumped, creating a strain on the environment and a disposal cost for dairy farmers. In this waste, we saw an opportunity. To make world-class spirits with the potential to support hard working local farmers and the environment. In collaboration with the University of Ottawa we've perfected

a process to convert milk permeate into an unbelievably smooth spirit. By buying milk permeate, we will also help Ontario dairy farmers.

Vodkow is fermented, distilled, and bottled at 34 Industrial Drive, Almonte, Ontario. It is available in selected LCBO stores and can be ordered in at the rest or ordered direct from the distillery.

For more information: [www.dairydistillery.com](http://www.dairydistillery.com) 1-613-256-6136 @DairyDistillery



# Scotiabank

A big Thank You goes out to Scotiabank for their support of our Dairy Symposium. Traditionally they are our milk sponsor but in the years that we have a processor donating our milk, they generously allow us the flexibility to apply their "Food from our Farms" donation to other products of our choosing. This year that makes them the:

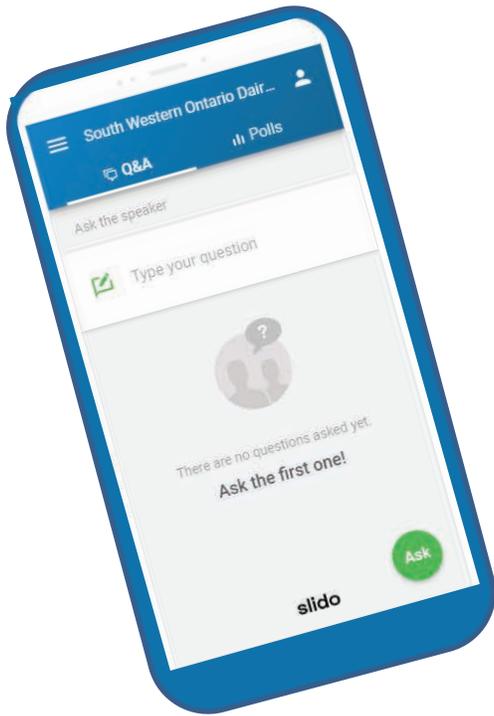
## Cheese Gift Basket Sponsor



**Encouraging dairy farmers and agribusiness to take pride in their products and give the gift of dairy !**



**Have a question for a speaker?  
Ask on Slido\***



Join at [www.slido.com](http://www.slido.com)  
Enter code  
**#SWODS23**



**Thank you for attending and see you in 2024**

Follow SWODS on Twitter and Facebook for updates on next year's event and program

Website: [www.dairysymposium.com](http://www.dairysymposium.com)

Twitter: [@SWODSdairy](https://twitter.com/SWODSdairy)

Facebook: [@SWODSdairy](https://facebook.com/SWODSdairy)

\*Standard mobile data charges apply



# Every operation is unique.

Your advice should be too.

Our experienced and knowledgeable agriculture account managers can help you reach your specific business goals. Whether you're looking to expand your operation, pass it to the next generation or focus on managing risks, we're here to help you succeed.

Tamara Court  
226.228.1486  
tamara.court@rbc.com  
Agriculture Relationship Manager

Taylor DeRyk  
519.532.1938  
taylor.deryk@rbc.com  
Agriculture Relationship Manager

Mitch Gingerich  
226.228.4272  
mitch.gingerich@rbc.com  
Agriculture Relationship Manager

476 Peel St. 2nd floor. Woodstock, ON N4S 1K1



# Gray Lea

BORN ON THE FARM



PROUDLY FARMER-OWNED  
PROUDLY CANADIAN

GAY LEA FOODS CO-OPERATIVE LIMITED

