

# LFCE SUMMER FIELD DAY

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## 2025 SCHEDULE



UNIVERSITY OF SASKATCHEWAN

Livestock and Forage  
Centre of Excellence

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PRESENTING SPONSOR

**W** CANADIAN WESTERN  
**AGRIBITION**



8:00 a.m.

### REGISTRATION/COFFEE

Forage and Cow-Calf Research and Teaching Unit (FCCRTU)

9:00 a.m.

### OPENING REMARKS AND ANNOUNCEMENT

- Elder Roland Duquette, Mistawasis First Nation
- Hon. Daryl Harrison, Sask. Minister of Agriculture
- Dr. Gillian Muir, Dean, WCVM

9:35 a.m.

### PENS, PLOTS AND PADDOCKS TOURS

12:00 p.m.

### LUNCH

- Complimentary beef-on-a-bun lunch
- Graduate student research posters
- Industry trade show

12:40 p.m.

### PRESENTATIONS

- Welcome from Canadian Western Agribition, program sponsor
- Keynote speaker: Dr. John Campbell, WCVM
- CCA Young Leaders

1:20 p.m.

Graduate student research posters  
Industry trade show

2:00 p.m.

### FACILITIES TOURS

4:00 p.m.

LFCE Field Day concludes



## ***2024 Field Day Agenda:***

08:15 Registration and coffee

09:00 Buses depart for concurrent tours

### **Tour 1: Forage/water/drought management**

- Jourdyn Sammons, graduate student, USask  
Soil moisture dynamics in annual and perennial grazing systems
- Dr. Bill Biligetu, College of Agriculture and Bioresources, USask  
Forage varieties for water use efficiency, saline tolerance
- Won Jae Chang, College of Engineering and Global Institute for Water Security, USask  
Development of economical salinity remediation strategies for agricultural water using innovative desalination minerals
- Dr. Phillip Harder, Global Institute for Water Security, USask  
Understanding the current agriculture-water situation from a water balance perspective
- Dr. Bart Lardner, College of Agriculture and Bioresources, USask  
Water in relation to pasture systems

### **Tour 2: Beef cattle feedlot health and nutrition**

- Dr. Cheryl Waldner, WCVN, USask  
Making the best use of antibiotics for treating respiratory disease in calves
- Dr. Emily Snyder, WCVN, USask  
Investigating the role of serotonin in feedlot AIP (acute interstitial pneumonia)
- Beatriz Montenegro Gonzalez, graduate student, USask  
Maximizing wheat straw use in the diet of backgrounding and finishing cattle with canola or flax screenings supplementation

### **Tour 3: Genetics/genomics (at FCCRTU site)**

- Dr. Mika Asai-Coakwell, College of Agriculture and Bioresources, USask  
Introduction to genetics
- Ezrie Scott, graduate student, USask  
Gene candidate in fat deposition
- Lance Leachman, livestock producer  
The producer perspective on genetics and genomics
- Dr. Matthew Links, College of Agriculture and Bioresources, Dr. Anatoliy Trokymchuk (graduate student), USask  
Nanopore sequencing and new opportunities for on-site decision making  
Tour of the ambulance

01:00 Buffet lunch at FCCRTU site

01:30 Welcome and introduction of special guests: Dr. Scott Wright  
Elder Roland Duquette, CWA President Michael Latimer, Terry Fonstad U of S

01:45 Keynote speaker Brian Perillat  
Key Factors Driving the Cattle Market, and Economic Indicators to Improve your Bottom Line

02:45 Tours of BCTRC and FCCRTU facilities, networking, student posters

04:00 Departure



Prepared by Lana Haight  
Aug. 8, 2023

## Overview

The LFCE summer field day presented by Canadian Western Agribition was held on Tues., June 20, 2023. Close to 250 people with about one-third being producers attended the field day at the LFCE Clavet facilities.

The organizing committee included faculty from the College of Agriculture and Bioresources and the Western College of Veterinary Medicine, representatives from the LFCE strategic advisory board and industry, Ministry of Agriculture extension specialists, and LFCE staff members. A full list of members can be found later in this report. The committee met six times between February and June.

Of the 84 people who responded to our post-event survey, 46% attended the field day for the first time. Of those, 39% said they are extremely likely to attend LFCE events again and another 43% said they are very likely to attend LFCE events.

Overall, most respondents rated the event components (A/V, tent layout, tradeshow, graduate student posters, bus tours, lunch, parking, washrooms, signage) as either good or excellent.

Respondents indicated the most valuable part of the day included networking (66.67%) and time to interact with researchers and students (58.33%) followed by technical information (45.24%).

Some of the biggest concerns identified in our survey: need for more producers to attend, better promotion of the event, opportunities to tour the facilities, and research to be more directly applicable to cattle and forage operations with findings distributed in handouts.

In addition to the field day, we hosted two other events at the LFCE. The field day committee was not responsible for planning them.

- On Mon., June 19, 28 people from children to retirees attended at a come-and-go community open house. The LFCE outreach students conducted tours of the BCRTU and we served coffee, juice and cookies. The goal was to open our doors to meet the neighbours. We advertised on the RM website, put up posters at Clavet businesses, and sent emails to the neighbours. This was a good event as the neighbours were interested in the LFCE and the research conducted at the centre. After their tours, several stayed and visited among themselves and with LFCE representatives.
- On Tuesday, after the field day, about 100 people - Ministry of Agriculture extension specialists and USask faculty and graduate students conducting research at the LFCE - attended a BBQ supper. We served bison burgers, salads and dessert. Agar's Corner catered the meal. We received partial funding from the Canadian Bison Association's Connecting with Consumers program. The goal of the event was to provide a casual venue for researchers and extensionists to connect and discuss research. We didn't hit the mark on this one. Most people sat with those they already knew. In the future, more needs to be done to help people mix with those they don't know.

## Schedule

9:30 – Registration

10:00 – Welcome

- MC: Scott Wright
- Elder Roland Duquette
- Honourable David Marit, Minister of Agriculture
- Dr. Angela Bedard-Haughn, dean of the College of Agriculture and Bioresources
- Kim Hextall, president of Canadian Western Agribition
- Robert Johnson, chair of the LFCE Strategic Advisory Board

10:30 – Coffee and more

- Graduate student posters
- Demonstration: Genomics in the field
- Tradeshow
- BCRTU metabolism barn mini-tour
- BCRTU cattle handling mini-tour

11:15 – Pens, plots and paddocks tour (Bus #1: BCRTU, Bus #2: FCCRTU, Bus #3: Section five)

12:30 – Lunch - Thank you to the Termuende Trust Fund

- MC: Scott Wright
- Scott Schultz, descendent of the Termuende family
- Graduate student posters
- Demonstration: Genomics in the field
- Tradeshow

1:30 – Pens, plots and paddocks tour (Bus #1: FCCRTU, Bus #2: Section five, Bus #3: BCRTU)

2:30 – Pens, plots and paddocks tour (Bus #1: Section five, Bus #2: BCRTU, Bus #3: FCCRTU)

3:30 – Closing remarks and snack

- Graduate student poster contest winners announced
- Door prize draw for Shania Twain tickets, courtesy of CJWW and The Bull – must be registered and in attendance to win the concert tickets
- Reminder to complete our survey: <https://www.surveymonkey.ca/r/LFCEFieldDay2023>

## Pens, Plots and Paddocks Tour

We chartered three buses to transport field day participants to three different locations (BCRTU, FCCRTU, Section 5) where the researchers (listed below) presented their work. LFCE outreach students acted as guides on the buses. While travelling from one stop to another, the students provided a brief history/overview of the LFCE and described their own research projects at the LFCE. At each of the three stops, we provided a tent, a table and a battery-powered portable speaker with a stand and a wired microphone for the researchers. Survey respondents rated the bus tours as good (46%) or excellent (39%). Some people wanted less talking and more seeing, opportunities to do something and handouts from the researchers summarizing their presentations. Most respondents rated the individual presentations as either good or excellent with combined percentages ranging from 77 to 93. Suggestions for improvements included adding visual aids and handouts, and ensuring the talks relate back to the producer.

## Tradeshow area

**Genomics in the field: rapid nanopore sequencing demonstration for point-of-need DNA analysis**

Presenters: Dr. Anatoliy Trokhymchuk (DVM), PhD candidate; Raiza de Almeida Mesquita, MEng, MSc; Dr. Matthew Links (PhD)

Researchers from the Western College of Veterinary Medicine, the College of Agriculture and Bioresources, the Department of Computer Sciences and Prairie Diagnostic Services are collaborating to develop rapid DNA analysis techniques to address the specific needs of the livestock and forage industries in Western Canada. This is possible because of the evolution of sequencing technologies that allows for rapid DNA analysis outside of conventional laboratory settings. The researchers will demonstrate DNA sequencing at a point-of-need and in a low resourced setting (i.e. outside exposed to the elements). They welcome producers and others to come to their booth and discuss the practical uses of genomics at point-of-need to support animal production.

### **Beef Cattle Research and Teaching Unit**

#### **Characterization and optimization of visual pen checking criteria to improve BRD treatment outcomes in feedlot cattle**

Presenter: Katrina Garneau, MSc. candidate

In this completed study, researchers in Dr. Diego Moya's lab sought to fine-tune the accuracy of visual diagnosis of bovine respiratory disease. They recorded the decision-making process of 12 experienced pen checkers diagnosing BRD in 163 newly arrived feedlot cattle. They also collected blood lactate, body temperature, and Whisper stethoscope readings from the animals. In comparing the detailed records with the checkers' observations, they assessed the accuracy of clinical signs in predicting severity, treatment response, re-treatment and death rates.

#### **Use of hybrid rye as a silage source for beef cattle**

Presenters: Fuquan (Frank) Zhang, PhD student, and Dr. Greg Penner (PhD)

Winter cereals provide an opportunity to diversify crop rotations and spread labour for seeding and harvest. Recently, hybrid varieties with a shorter pollination window have been developed, but there is limited information available on the use of the hybrid rye for silage. We will discuss aspects related to hybrid rye production, yield, and quality, and impacts on feed intake and growth for backgrounding steers.

#### **Ergot in feedlot cattle diets: How much is too much?**

Presenter: Jenna Sarich, MSc. Candidate

When is ergot contamination at a greater risk and how to spot toxicity in your herd? The prevalence of ergot has been increasing in the last decade, especially in Western Canada. This Ribeiro lab study helps to characterize the performance, health and welfare impacts that may be observed by beef producers when ergot levels are above tolerance.

### **Forage Cow-Calf Research and Teaching Unit**

#### **Selecting beef heifers with greater fibre intake and digestion: Focussing on animals that can thrive on the range**

Presenter: Nikita Payne, MSc. candidate, and Megan Dubois, MSc. Candidate

Maintaining feed efficiency while feeding high forage diets is a primary challenge for many Canadian producers. In this study, the Ribeiro lab aims to evaluate the ability of certain cattle to eat and digest fibre more efficiently, allowing for better performance for beef cattle herds.

#### **A genomic study of beef cow efficiency**

Presenters: Laine Radwell, MSc. candidate, and Dr. Mika Asai-Coakwell (PhD)

Efficiency of the beef cow is a complex trait and is influenced by many factors including nutrition, management, health, microbiome and genetics. The goal of this research is to identify regions of the

genome and genes involved in forage efficiency. Identification of genetic variations associated with cow efficiency will aid in selection of efficient cows on farm.

#### **UAV application in forage stand assessment and agronomic data collection**

Presenter: Alex Waldner, MSc. Candidate

Unmanned aerial vehicles (UAV) have the potential for improved data collection in forage breeding programs and agronomic research. Students in the Biligetu lab recently conducted studies of UAV application on phenotyping cicer milkvetch germplasm and assessing stand establishment of forages grown in saline soils. The results of these studies will be discussed.

### **Section 5**

#### **Benefits from precision cattle manure management**

Presenter: Dr. Jeff Schoenau (PhD)

The Schoenau lab researchers have completed a five-year manure management study at the LFCE. They compared approaches to determine how to get the maximum agronomic benefit from cattle manure while minimizing environmental impacts. Precision application included selection of appropriate rates and adjustments made to account for differences in productivity and proximity to water across farm field landscapes. The results show precision application enhances crop growth and manure nutrient recovery while reducing entry of manure constituents into water and air.

#### **Alternative trace mineral supplementation strategies for beef cattle**

Presenter: Corissa Wilcox, MSc. Candidate

Dr. Bart Lardner (PhD) and his graduate student conducted a two-year study at the LFCE where they administered to beef cows an injectable trace mineral supplement source (Multimin<sup>®</sup>90). In their investigation, they were determining whether incorporating an injectable trace mineral supplementation program is a feasible practice for cow-calf producers in western Canada to improve cow and calf performance, cow reproduction efficiency and economic profitability.

#### **Level of supplemental fat from canola seed in the diet of pregnant beef cows: effects on cow and calf performance**

Presenter: Erika Cornand, MSc. Candidate

Researchers in the Lardner lab are assessing if there is an optimal level of supplemental fat from canola seed in the diet of pregnant beef cows that leads to improved cow and/or calf performance. During the three-year study, the researchers are learning how the use of canola as an alternative energy source could lead to improved reproductive efficiency, milk quantity, and/or milk quality of the dam post-treatment, especially after being exposed to cold winter weather. The subsequent performance of the cows' calves from birth to weaning and throughout the background and finishing periods will be assessed, along with carcass traits at slaughter to determine the optimal level of fat from canola seed.

In the survey, several people expressed an interest in touring the fields and facilities to learn about the LFCE as a research centre

# Field Day Agenda

TUESDAY, JUNE 21, 2022

**9:30 a.m.** Registration

**10 a.m.** Welcome and opening remarks

**10:15 a.m.** Featured speakers and additional activities

"The LFCE weather and climate story: unlocking the mystery of moisture." Phil Harder

"Feeder cattle traits that make a difference in price." Kathy Larson

Metabolism Unit and USask graduate student research posters

**11:45 a.m.** Lunch

**12:30 p.m. Concurrent tours: forage**

"Sainfoin-grass mixture establishment: cross row, alternate row, and mixed row seedings. Which method to choose?" Bill Biligetu

"Plant breeding and forage agronomy: improving cicer milkvetch and meadow bromegrass for stockpile grazing." David McTaggart

"CMV seed treatment: enhancing germination." Karen Tanino

**12:30 p.m. Concurrent tours: feedlot**

"High moisture corn products for feedlot cattle and characterization of corn stover from low-heat unit corn." Rachel Carey

"Curbing liver abscesses in the feedlot." Tyen Paterson

**12:30 p.m. Concurrent tours: Section 5**

"Better diagnostics for animal health: tools, tests and data for healthier cattle." Anatoliy Trokhymchuk

"Project update: annual versus perennial forage systems." Bart Lardner & Megan Wasden

**4 p.m.** Return to tent

**4:15 p.m.** Closing remarks

\*agenda subject to change without notice.



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The logo for Canadian Western Agribition, featuring a stylized 'W' inside a circle.  
CANADIAN WESTERN  
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# 2021 LFCE Field Day: Back to Business

## Presented by: Canadian Western Agribition

July 20<sup>th</sup>, 2021 at 9:30 a.m. to 4:00 p.m.

Livestock and Forage Centre Of Excellence, south of Clavet, SK.

### Tentative Agenda:

09:30 Registration

10:00 Welcome & Opening Remarks

10:15 Panel Discussion

#### **Back to Business: Mental Health, Markets and Science Solutions**

Dr. Scott Wright, Ph.D., Anne Wasko, Market Analyst, Gateway Livestock and Cynthia Beck, M.Sc. graduate student, Clinical Psychology, University of Regina

11:20 Integromes and Bison: Dr. Gregg Adams, DVM, Ph.D

11:40 Lunch Break

12:20 Load Buses for concurrent sessions

#### **Section 5:**

Annual & Perennial forage systems – Effect on yield, quality, steer performance and gas emissions: Dr. Bart Lardner, Ph.D & Megan Wasden, M.Sc. graduate student.

Effect of forage variety on forage characteristics, animal preference and grazing behaviour: Dr. Bart Lardner, Ph.D & Cassidy Sim, M.Sc. graduate student.

#### **Forage & Cow-calf Research and Teaching Unit:**

Water quality and its impacts on cattle: Dr. Greg Penner, Ph.D & Catherine Lang, BSc. AAg.

Genomic and Genetic Factors in Gestation Length: Dr. Mika Asai-Coakwell, Ph.D & Hailey Bolen, M.Sc. graduate student

#### **Beef Cattle Research and Teaching Unit:**

Stocking density and bunk size on cattle behaviour, performance, and liver abscesses: Dr. Diego Moya, DVM, Ph.D

Dietary flavours to stimulate intake and health of newly arrived feedlot cattle: Dr. Diego Moya

Impact of increasing levels of ergot in the diet of feedlot cattle: Dr. Gabriel Ribeiro, DVM, Ph.D

4:00 Return to tent, closing remarks

**Registration is free of charge, lunch is included. Deadline to register is July 12, 2021.** To register, visit the EventBrite link <https://www.eventbrite.com/e/lfce-field-day-tickets-159862808965>



