

### Forage and Livestock eNews

Updates and information from across the industry

### **Volume 16, Issue 1, January 24, 2023**

USask researchers aim to reclaim saline soils
University of Saskatchewan, Collage of Agriculture and Bioresources, January 12, 2023

Soil salinity is an issue in many areas of Western Canada and seeding annual crops in these areas is often less economical due to limited crop production.

Working with USask forage breeder Dr. Bill Biligetu (PhD), graduate student Alex Waldner is studying the effectiveness of using companion crops to help establish saline-tolerant forages in saline soils.

"By evaluating establishment methods and forage mixtures we can determine methods to successfully seed forages in saline soils; and by assessing economic returns and ecological benefits we can provide reasons to convert saline soils to perennial forages," said Waldner, a master's student in the College of Agriculture and Bioresources.

A common challenge with establishing forages though is weed control, as forages in the seedling stage aren't competitive against weeds.

"Many acres in Saskatchewan are affected by salinity, which can greatly limit crop production and leave these areas vulnerable to weed invasion from salt-tolerant weeds such as kochia and foxtail barley," said Waldner, who grew up on a farm near Swift Current.

### Read the full story here

The Saskatchewan Forage Council, the Saskatchewan Cattlemen's Association, the University of Saskatchewan and the Livestock and Forage Centre of Excellence have worked together to post QR code signs at the project plots linking to a web page to share project news and data.

Scan the QR code to read more about the project and to see project video updates.

You can also click here to visit the project page





# Foraging Into the Future by: Shannon McArton, SFC Executive Director

Co-hosted by the Saskatchewan Ministry of Agriculture, AAFC and Swift Current Creek Watershed Stewards, Foraging into the Future has been held every other year since 2002. Appealing to forage industry stakeholders and producers, the conference has a strong agenda that combines tech transfer and practical advice for immediate on-farm opportunity with forward-thinking concepts and research.

Saskatchewan Forage Council was pleased to be a sponsor of the 2022 event and I was able to attend on its behalf. We were very well pleased with the event and our small role in supporting its success.

"Adding Value in Unconventional Times" was the theme of Foraging into the Future XI, held on December 14th and 15th at the Living Sky Casino and Convention Centre in Swift Current. The return to a face-to-face format was welcomed with strong delegate registration numbers and good sponsor representation.

"It was exciting to have this event back in-person after so many years, and to work with AAFC and the Swift Current Creek Watershed Stewards, along with the amazing groups that sponsored this conference," said Austin Baron from the Saskatchewan Ministry of Agriculture, conference Chair. "I really feel like this is an important event to producers in the south-west and I was very happy to hear such positive reviews following the event."

Thought-provoking topics with good speakers ranged from economics, variety selection and best practices for seeding and rejuvenating forage stands, to practical nutrition, record-keeping, marketing and health management advice for cattle production. The integration of livestock into annual forage production was a popular topic, in keeping with the growing interest in regenerative agriculture practices for improved soil health. Producers love to hear from other producers, and the focus was sharp when ranchers Peggy and Darrell Walker from Borden, and the 2022 Saskatchewan and Canadian Outstanding Young Farmers Cody Straza and Alison Squires from Upland Organics near Wood Mountain, introduced us to their respective operations.



"The organizing committee was pleased with attendance and would like to thank all of the attendees and sponsors who took the time to attend," said Kevin Steinley, Executive Director of the Swift Current Creek Watershed Stewards. "We're looking forward to the next conference in December of 2024."

Congratulations to the organizing committee on a successful conference, which

was very well executed. Saskatchewan Forage Council looks forward to supporting FITF

XII in 2024.

Image: FITF XI Committee provided by FITF Chair Austin Baron

# Manitoba Government Announces \$10-Million Investment to Support New Prairie Innovation Centre at Assiniboine Community College News release, Province of Manitoba, January 17, 2023

BRANDON—The Manitoba government will invest up to \$10 million to support the development of the Prairie Innovation Centre at Assiniboine Community College (ACC) in Brandon, Premier Heather Stefanson announced here today as part of her address at the 46th annual Manitoba Ag Days.

"As our economy emerges into a new era of growth, our government is working collaboratively with industry, the business sector and our post-secondary institutions to ensure we attract our youth to the jobs of the future, and provide the training and skills necessary to be successful," said Stefanson. "I want to commend ACC and their leadership for spearheading this expansion project, along with their donors and community members who are keen to see this centre come to life which will provide innovative programming and support the growth of the local community and economy."

As part of ongoing collaborative efforts to align education and training to meet evolving labour market needs and foster competitiveness and growth, ACC aims to significantly expand its programming to address labour shortages and high-demand jobs, specifically in the agriculture sector, the premier noted.

#### Read more



### Soil Health and Grazing Conference a great success

by: Jeremy Brown, SFC Vice-President

The third biennial Western Canada Conference on Soil Health and Grazing was hosted December 13-15, 2022 in Edmonton, AB. This popular event was sold out once again, with 550 attendees from BC, AB, SK, and MB. The atmosphere at the event was very positive, with an

evident keenness to learn and encourage each other in the management of our operations.

This edition's theme was "Biology not Geology". Topics included soil health and carbon research, agronomic information related to regenerative approaches, grazing management, and business and social considerations.

With a full three-day program, the agenda included many technical presentations and a producer panel each day. It was both informative and inspiring to hear from producers who are actively innovative, learning through trial and error, and seeing some exciting results. One of the producer panel members was Paul Kernaleguen (an SFC board member from Birch Hills), discussing his journey with multi-species forage crops and soil health. He has had some impressive crop yields and foresees much possibility for continued improvement.

It was interesting to have Senator Paula Simons provide a greeting at the outset of the conference and provide an update from the Senate Committee on Soil Health in Canada. She was also able to attend the entire event, a great opportunity for our industry to connect with Federal leadership. The keynote speaker was James Rebanks, a livestock farmer from England who has become internationally known through his book: The Shepherd's Life. He recounted his story of reimagining the management of their 600-year-old farm with practices focused on ecosystem health and local communities.

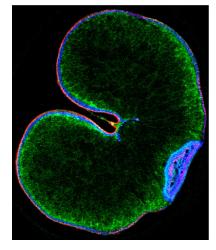
Of course, in addition to all of the presentations, the table and hallway discussions were valuable as everyone expanded their networks and gained other people's experiences and insights. No doubt, everyone went home with heads full of ideas and a determination to try some new things.

## Imaging Element Distribution of Oat Grain for Livestock Using Advanced Synchrotron Technique

by: Dr. Peiqiang Yu, Professor and Ministry of Agriculture Strategic Feed Research Chair in Feeds R&D, Department of Animal and Poultry Science University of Saskatchewan

A Saskatchewan Ministry of Agriculture Strategic Research Chair (SRP) in Feed R&D Programs (Professor Dr. Peiqiang Yu) project is being completed by PhD student, Ganqi Deng.

This project is using advanced synchrotron technique as a novel tool to image element distribution in cool-season oat grain in Saskatchewan in a chemical sense. Our study is focusing on the impact of oat variety has on element distribution and molecular structure. We want to investigate impact of oat variety and molecular structure spectral feature on animal nutrition and reveal interactive relationship between differences of elements distribution, molecular structure, and parameters of degradation and digestion of oats. For example, the following picture (Fig 1) shows the distribution of sulfur, zinc and manganese in oat grain. These



colors were co-plotted and their color intensity adjusted to reveal co-occurrence of elements of interest. The green, blue, and red areas indicate sulfur, zinc and manganese, respectively.

This picture was created by synchrotron based on X-ray fluorescence (XRF) at Canadian Light Source (CLS). Then PyMca 5.6.5 was used for co-plotting three elements distribution in one image.

This SRP feed research program is being carried out in collaboration with CLS scientists (Miranda Vu, Malgorzata Korbas, Viorica F. Bondici, Chithra Karunakaran) and feed and animal nutrition researchers (Dave Christensen, Bart Lardner). The CDC oat sample was provided by CDC breeder, Aaron Beattie.

This SRP feed R&D research program was supported by NSERC, POGA, and Ministry of Agriculture Strategic Feed Research Chair Program.

For the detailed information, please contact Peigiang Yu, Professor and Ministry of Agriculture

Strategic Research Chair in Feeds R&D, Department of Animal and Poultry Science, University of Saskatchewan at 306-966-4132; or email: Peigiang.yu@usask.ca.

Image: Figure 1. The Elements Distribution in CDC Arborg Oat

### SFSDC Annual General Meeting & Forage Seed Production Forum 2022

The SFSDC wishes to thank those in the forage seed grower community, including growers, industry agronomists and researchers, the AV team from graffitiTV, local businesses and event organizing volunteers for making their 2-day event a success.

The forage seed production sessions were well attended by growers and industry agronomists. Industry leaders in applied research and producer panels shared their knowledge of conventional and organic forage seed production systems.

A very special thank you to all those who contributed to the outstanding success of our STARS fundraiser. We far surpassed our goal of \$5,000.00 for one STARS mission/flight! That success is thanks to the expertise of auctioneer Bruce Schapansky, who donated his services, the local businesses, ag input suppliers and forage seed growers who donated sale items and all those who bid, purchased and gave cash donations.

Read more about the AGM and Forage Seed Production Forum here

### **Upcoming Events**

### Saskatchewan Beef Industry Conference

January 24-26, 2023 Saskatoon, SK Visit the website for more info

### Native Prairie Speaker Series (Woody Encroachment in SK)

January 31, 2023 Via Webinar Learn more here

### Saskatchewan Association of Watersheds 15th Annual Conference

January 31-February 1, 2023 Saskatoon, SK Learn more here

### **Celebrating Rural Ranching Women 2023**

February 2, 2023 Maple Creek, SK Learn more here

#### 2023 Western Canada Feedlot Management School

February 7-9, 2023 Saskatoon, SK Learn more and register here

#### Soil Health Conference - SaskSoil

February 14 & 15, 2023 Regina, SK Visit the website

#### **BCRC Webinar: Record Keeping Part 2**

February 15, 2023 Via Webinar Register here

Prairie Conservation and Endangered Species Conference February 21-23, 2023 Calgary, AB Learn more and register here

Financial support for the Forage and Livestock eNews is provided in part by one of our partners, the **Saskatchewan Forage Seed Development Commission.** 



**Forage and Livestock eNews** is published by the Saskatchewan Forage Council (SFC). Opinions and information are provided by the authors and publication does not imply endorsement by the SFC.

The Saskatchewan Forage Council gratefully acknowledges funding for our "Facilitating Forage Initiatives in Saskatchewan" project through the Saskatchewan Cattlemen's Association Industry Development Fund:



The Saskatchewan Forage Council recognizes our Annual Supporters:

**Gold Sponsor:** 





**Silver Sponsors:** 





### **Bronze Sponsors:**













Join our mailing list!





