



Meet in the Heart of Canada's Premier Food Corridor

The Agri-food Hub and Trade Centre

Submitted by Lethbridge and District Exhibition

Rooted in Lethbridge

Since 1897, Lethbridge & District Exhibition has stood out as a pillar in its community as Southern Alberta's premier event venue for agriculture, tradeshows, midways, rodeos, sporting events, conferences and special events. With a 125-year history under its belt, Lethbridge & District Exhibition is the fourth oldest agricultural society in Alberta, and welcomes nearly 400,000 guests each year while contributing economic benefits to the community and local entrepreneurs.

A combination of rich agricultural roots, a unique geographical location within Canada's Premier Food Corridor and a commitment to its community, positions Lethbridge & District Exhibition to share Southern Alberta's best kept secret—a unique food story that is ready to be told to the world through one-of-a-kind culinary and event experiences. The fields of Southern Alberta sustain the regional economy.

125 Years in the Making

Lethbridge & District Exhibition was founded as the Lethbridge & District Agricultural Society in 1897, when local ranchers and community-minded citizens organized the first fall exhibition. The first exhibition, hosted on October 5-6, 1897, promoted commerce of the bountiful harvests of the season. The exhibition invited the agricultural community to showcase its prized exhibits and promote its larger influence on what would later become the annual fair.

Today, the 125-year-old organization produces Whoop-Up Days, Ag-Expo and a seasonal farmers' market that sells thousands of local products. As the role of the agricultural society evolves, so too does the business model within which it operates in order to drive innovation within the agri-food industry. Lethbridge & District Exhibition is a leader in the industry and a champion of the rich natural advantages of Alberta.

In March 2021, shovels officially broke ground on the Agri-food Hub and Trade Centre. The \$70.6 million-dollar project will serve as a transformational economic driver for southern Alberta's agri-food tourism industry. The new facility will double the venue's existing hosting capacity with 268,000 square feet of rentable space. The expansion development allows the City of Lethbridge to transform its regional, national and international visitor economy by attracting new events and conferences to Canada's Premier Food Corridor. Once completed in Spring 2023, the Agri-food Hub and Trade Centre is expected to re-invest more than \$90 million annually to the region's economy. The expansion will maintain the organization's traditional roots as an agricultural society while also integrating a business model that offers unique destination experiences to compete with larger market venues.

The venue

- 268,000 square feet of rentable space
- Four Exhibition halls totaling 104,000 square feet of trade show space

- Lakeview Salon overlooking Henderson Lake
- Three Salon rooms
- Four Meeting suites
- Pre-function lobbies
- Less than two-hour drive from Calgary, with connecting flights and proximity to hotel properties
- Locally-sourced farm to table food

A Taste of Southern Alberta

The new development aligns with the work of the regional partners in Canada's Premier Food Corridor to attract private investment and includes enhanced incubation opportunities for local producers to scale their businesses in larger markets. More than bricks and mortar, the Agri-food Hub and Trade Centre will become a teaching kitchen for students to hone their skills and showcase regional products—all in the same space where entrepreneurs will also launch their businesses to be experienced by thousands of visitors from across the globe.

"Our campus will become the premiere destination for agricultural advancement through the development of business sectors which showcase Alberta's agricultural leaders," says Mike Warkentin, Chief Executive Officer, Lethbridge & District Exhibition. "The development of economic impact strategies paired with an ecosystem of world-renowned innovators, allows our organization to break the mold of a traditional agricultural society to expand outside of its market."

Continued on Page 2

WHAT'S in this ISSUE?

PAGE 2
The right time for soil sampling

PAGE 3
Improve Your Odds of Getting Hunting Permission on Private Land

PAGE 4
Bale wrap and silage plastic recycling is getting easier in Lethbridge County!

PAGE 5
Funding Opportunities for Alberta Farmers

PAGE 6
Local Business Spotlight

PAGE 7
Fall reminders for confined feeding operators

PAGE 8
Lethbridge College agriculture research updates

PAGE 9
Could rice be the next crop in southern Alberta?

PAGE 10
Do you know your Invasive Weeds?

PAGE 11
Using innovation to coexist with beaver populations

PAGE 12
Native grasses and their importance to the Blood Tribe

PAGE 13
What do cows and fish have to do with each other?

PAGE 14
Why the loss of bats matters

PAGE 15
Hilltoppers Gymkhana Club - 3 Generations

PAGE 16
Past, Present, Future



Lethbridge County Agriculture Service Board

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Thank You

We would like to recognize and say thank you to members of the Monarch Committee Association for all the volunteer work they have done within in the community over the years. The work you've all done has not gone unnoticed. **THANK YOU!**



(Top right) Russ Trabor installs new Monarch Committee Association sign. (Above left) From Left to Right: John Kramer, Brian Wilson, and Ken Tollefson have been watering and maintaining the trees and lilacs in the parks for over 10 years. (Above right) From Left to Right: Vance McGrath and Ken Tollefson build the new sidewalk to the community center.

THE RIGHT TIME for soil sampling

Submitted by:
Canola Council of Canada

Soil testing indicates soil nutrient reserves available for crop uptake. This is useful any year, and especially after low-yielding or high-yielding years when reserves may be more difficult to predict. Test results will help farms set fertilizer rates specific to the needs and yield potential of each field – a key step in implementing the right rate principle of **4R Nutrient Stewardship practices**.

Soil sampling just prior to seeding provides the most accurate measure of nutrients available to the crop, but the springtime slot has practical limitations. Fall soil sampling can be almost as accurate and has various advantages: less time pressure to get samples collected and analyzed, especially if done after harvest; more time for fertilizer planning, including variable rate prescription maps; and the opportunity to buy the right amount of fertilizer at a lower price. (Prices are often, but not always, lower in the fall.)

The best time for fall sampling is after soil

has cooled to at least 10°C. Cool soils reduce the microbial activity that can mobilize nutrients. Soil samples collected after this activity slows down will more closely reflect spring nitrate (NO₃⁻) contents. If farms plan to band fertilizer in the fall, sampling when soils drop to 10°C (not too much lower) should allow for **fall application** before the ground freezes.

Sampling immediately after combining may show what nutrients, if any, were deficient for the current year's crop, but early fall sampling is not recommended for planning next year's fertilizer rates. Changes in nitrogen levels often occur after sampling due to moisture-fueled mineralization and losses to leaching, denitrification and immobilization.

Cost. Custom sampling in two parts (0-6" and 6-24") and lab analysis of that two-part soil sample will cost around \$100. Cost per sample will be lower when a farm submits more samples. At \$1, or less, per acre, soil sampling will pay off if farmers use results to make more refined fertilizer rate decisions.

Composite samples. One composite sample per field can provide a general impression of soil nutrient levels. For the composite, take 15-20 sub-samples from the most productive areas – not hill tops, not low spots, not saline areas. Divide each core into two or three soil depths and put them into separate pails. Suggested depths are 0-6" and 6-24", or a three-way split of 0-6", 6-12" and 12-24". With the 15-20 sub-samples separated by



depth, blend those samples to create one composite sample per depth. Submit each depth in its own sample bag.

With one composite sample per field, farmers can create fertilizer blends specific to the needs for each field. If field-specific fertilizer blends are not logistically possible, a compromise is to apply the same blend but at different rates to match the yield goal for each field.

Zone samples. For more precision, collect separate samples from common zones within the field. Zones are generally based on productivity differences that can be fairly predictable based on soil characteristics, drainage or elevation. Three zones could be hilltop, mid-slope and low-lying areas. Five zones would delineate the side slope positions. For each zone, follow sampling methods similar to the composite sample technique. This could mean six or more samples per field (two depths for three zones, for example), but this method can provide meaningful results for fields with higher levels of soil variability, and can point to the value of **variable-rate fertilizer applications**.

Early Ranches in Lethbridge County – The Cameron Ranch

Submitted by:
Belinda Crowson

In the late 1800s and early 1900s, ranches, large and small, dotted the area which is now Lethbridge County. One of the largest, and best-known, was the Cameron Ranch.

In 1888, Sir Roderick Cameron purchased 23,000 acres of land near the Little Bow River from the North Western Coal & Navigation Company. Over time, he expanded the ranch and soon had 60,000 acres of land.

To get a sense of how large the ranch was, a Lethbridge News article of 5 February 1890 noted that "Sir Roderick Cameron has had delivered from Donald, B.C., at the 15 Mile Tank, 13,000 cedar posts and rails for the construction of a fence around his ranche, which includes townships 10 and 11 north of here."

The ranch certainly wasn't Cameron's only enterprise. Sir Roderick Cameron was an international businessman who co-founded the R.W. Cameron and Company Shipping Line in New York City. He was also friends with Sir Alexander Galt and an investor in the Alberta Railway & Irrigation Company and other Galt companies.

Cameron's ranch wasn't a traditional one, as he didn't raise cattle, but ponies. Most records report that he raised Shetland ponies, but at least one suggests it was Welsh ponies, or at least Welsh ponies in addition to the Shetland ponies. Some of the ponies were destined for work in the coal mines in the area, while others were sent east to be sold as children's ponies.

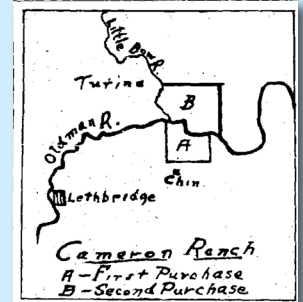
The ranch appears not to have been very successful. Having an absentee landowner was part of the problem. Wolves and other menaces unfortunately caused great losses. Certainly, without the owner to watch over the project, mismanagement may have been part of the problem.

Over time the ranch was broken up.

In 1909, the Lethbridge Herald noted homesteaders were opening up farms on the Cameron Ranch. The southern part of the ranch was sold off first and became part of the land available to homesteaders during the land boom in the early 20th century.

North of the river, in 1917, the Noble Foundation purchased over 20,000 acres of the Cameron Ranch. Unfortunately for Noble, because of drought and decreased wheat prices and having his money spread too thin over too much land, the Noble Estate was foreclosed upon in 1922. The land was in time broken up and sold into smaller farms and holdings.

While the Cameron Ranch is long gone, the Cameron name lives on in the name of the Cameron Hutterite Colony, which was established in the 1960s upon part of the land that was once the Cameron Ranch.



Continued from Page 1

Southern Alberta offers world-class agri-food products and destination experiences that highlight the province's ability to generate economic development and tourism on a global scale—something that has never before existed in the Lethbridge community. The unique biodiversity and landscapes of the surrounding Lethbridge region allow visitors to enjoy truly unique experiences that connect them directly with the land and people who produce some of the world's highest volume of agricultural exports.

Welcome to Lethbridge

Alberta's vibrant tourism sector offers limitless potential for

growth to welcome the world to Southern Alberta's backyard. Lethbridge & District Exhibition is at the forefront of driving the tourism sector through un-matched culinary and agricultural event experiences with the completion of the Agri-food Hub and Trade Centre.

"The Agri-food Hub and Trade Centre is a community asset for Lethbridge and the agricultural sector it serves," says Mark Sayers, Councillor, Lethbridge County and Board of Directors, Lethbridge & District Exhibition. "Producers and processors in southern Alberta will have the opportunity to showcase agricultural innovation that is distinct to the region, and the world-class products that are produced by our neighbors in the heart of Canada's Premier Food

Corridor."

When planners bring delegates to host their event in Lethbridge, they will experience one-of-a-kind Indigenous tourism experiences, expansive views of Henderson Lake, a rich agricultural community with big city amenities, world-class food producers and growers, some of Canada's best growing conditions, four UNESCO World Heritage Sites and iconic mountains that surround them in every direction, including Waterton, Fernie, Banff and Montana. These uniquely Lethbridge experiences will create meaningful connections between the community and outside markets for the people who call Southern Alberta home.

Twine – it's one of the easiest ag plastics to recycle

Of all the agricultural plastics on prairie farms, baler twine is one of the easiest to overlook when it comes to a commitment to recycle.

Unlike grain bags, which, when empty, are a massive amount of plastic laying in the field, baler twine accumulates in smaller bunches, seemingly innocuous until they start to take over a corner of the barnyard or wrap around farm equipment axles. Some farmers relegate baler twine to the burn barrel, but that's one of the worst options for managing it because burning twine releases toxins into the air.

So, what can farmers do with used ag twine?

In Lethbridge County, a pilot, '[Alberta Ag Plastic Recycle It!](#)', is underway to give farmers the option to take baler twine to

Burning twine is illegal in Lethbridge County.

Lethbridge County for recycling, giving that old twine a new life.

Cleanfarms, which operates the pilot program on behalf of Alberta's Agricultural Plastics Recycling Group (APRG), sends the used baler twine to recycling facilities in Canada and the U.S., where it is turned into pellets to be used in the production of new materials. Twine is made of polypropylene, which is a plastic that can be easily remanufactured into new products such as car parts, dimensional lumber, flowerpots and composite decking.

Cleanfarms is also working with the Lethbridge County to pilot ag recycling round-up collection events in the spring of 2023. The exact dates and locations are to be determined but expect to be able to bring all that baler twine collected throughout the

How to Prepare Twine for Recycling

The pilot program enables twine recycling by offering large, free, twine collection bags. The next three steps are straightforward:

1. Shake – Remove as much debris, snow or ice as possible. Excessive organics and other materials (such as net wrap) mixed with the twine will cause it to be rejected or result in the material being sent to the landfill. Recycling processors wash and shred the plastic, so they need it as clean as possible.
2. Bag – Place loose twine in a clear collection bag. They are available at no cost to farmers and can be obtained from all transfer stations in Lethbridge County. If using your own clear bag, poke holes in the bottom to drain moisture. With any bag, once full, secure it closed with twine or a zip tie.

winter and some other select ag plastics for free at the same time. More details about the round-up events will be made available throughout the winter.

For questions regarding twine recycling or any other Cleanfarms program, please email info@cleanfarms.ca or call 1-877-622-4460.

cleanfarms

ALBERTA AG-PLASTIC
RECYCLE IT!

Alberta

The pilot project is led by the multi-stakeholder Agricultural Plastics Recycling Group, funds were granted by the Government of Alberta and are administered by Alberta Beef Producers.

Improve Your Odds of Getting Hunting Permission on Private Land

I have a confession to make. I have never been very confident in my ability to get permission to hunt on private land. Or maybe it's just that I've never been comfortable asking for permission. I am a quiet, introverted person, so reaching out to people I don't know doesn't come easy. And to be honest, when I first started hunting in Alberta, I really didn't have any experience with asking for permission on private land. But not long after moving here, I worked for a fellow who told me about the family tradition that his father had introduced him to as a child. Each summer they would head out of the city on Saturday mornings and do the rounds, visiting farmers they had built relationships with over time. Sometimes they would stop in to just say a quick hello. Sometimes they would sit down for coffee. And sometimes they would roll up their sleeves, put on their work gloves, and help with things that needed to be done around the farm. Eventually, the conversation would turn to hunting and they would discuss access to the farmer's land for the coming fall. Permission was never guaranteed, but they always left the driveway on positive terms and promised to stop in again next year. This was just part of how they obtained hunting permission on private farmland, and it was done well in advance of opening day.

That was how things were done in the good old days. But people don't do that now, do they? It turns out that recent research shows that hunter/landowner relationships, whether they're built over a cup of coffee, a hammer and some fencing staples, or a simple phone call or text message, are still critical to obtaining and maintaining hunting access on private land in Alberta.

Landowners want to know something about you

One of my jobs at Alberta Conservation Association over the past couple years has been to oversee research into questions of private land hunting access in Alberta. We surveyed landowners last year and asked them about their approach to allowing (or not allowing) hunters on their land. The majority of landowners that we heard from were open to having others hunt on their land, but that good will didn't extend to just anyone. Not surprisingly, they were most likely to provide hunting access to friends, family, and neighbours. But previously unknown hunters who made the effort to build a relationship with them over time were viewed similarly to neighbours. Hunters that the landowner didn't know anything about were rarely



Photos courtesy of Robert Anderson



considered acceptable for granting land access.

Other hunters can ruin it for you

The number two concern expressed by both landowners who allow hunting and those who do not was safety. But even more concerning for them was trespassing. Unfortunately, the actions of others can have a negative impact on your hunting access. Ironically, hunters and other recreationists who don't ask for permission before going onto private property are causing the ethical hunters to lose opportunities. Some landowners reported frustration with trespassing snowmobilers and dog walkers, which was affecting their openness to allow hunting. But we also heard from landowners who said that hunters who report suspicious activity make them glad to have another set of eyes watching out for their property.

Agricultural land is key

Over 2000 Alberta landowners completed our survey. Sixty-five percent identified their land as being primarily for agricultural purposes. The majority of that was land in annual crops or pasture. We found that the more property a landowner had in non-agricultural use (e.g., rural residential or recreational), the less likely they were to allow others to hunt on that land.

Once it's gone, it's gone

The survey showed that in recent years six times as many landowners had become less likely to allow others to hunt on their land than those who had become more likely. The good news is that just over half of the landowners who completed the survey said that their approach had not changed.

Most landowners are reasonable people. They want the same things that we would if we were in their shoes (respect, honesty, safety, etc.). But negative experiences with hunters, even if they are only a few "bad apples", can cause some landowners to close off access to everyone. Nearly 60% of the landowners in our survey who said they do not currently allow hunting report that they did allow hunting in the past. As one landowner commented, "I know not all hunters are the same. Some are very respectful of us, our land and the wildlife. It's the trespassers and poachers that wreck it for the rest."

Unfortunately, the data suggest that for most landowners who choose not to allowing hunting, very little will convince them to



change their mind. Once access to a piece of private land is lost, it may be lost for good. So, if you see someone acting illegally (remember, going onto most private property without asking permission first is illegal in Alberta), it is in your best interest—in the best interest of all hunters actually—to call the Report-A-Poacher number and share whatever information you can.

It is always a good practice to check in with the landowner first, even if you know permission is almost guaranteed. We heard from landowners who were frustrated by those who went ahead and accessed land without even sending a courtesy text message. This applies to landowners who you don't know well, and to those that you do, including your family, friends, and neighbours.

There is lots of opportunity, if you put in the effort

Despite some areas of concern, our survey demonstrated that there is still plenty of opportunity out there for hunters to access private land. Landowners were most open to foot access and hunters using the land to help feed their family. Many had people on their property between 10 and 29 days a year. And when they did have hunters, it was most commonly 1 or 2 at a time. If you want to be one of those hunters, you increase your odds by making the effort to reach out to the landowner at least a couple days ahead of time, if not a couple weeks. Doing so by phone or in person was considered most appropriate. And when you do make a positive connection with a landowner, continue to cultivate that over time, keeping in mind that hunters who built multi-year relationships were just as likely to be granted permission as the landowner's neighbours.

The old is new again

They say that the more things change, the more they stay the same. From what we learned from surveying landowners, the old family tradition of doing the rounds to check in with farmers you've built a relationship with is probably a technique that would continue to be successful. And you never know, you may even end up getting a cup of coffee and a piece of pie out of the deal. That sounds pretty good, even for an introvert like me.

For more information on the survey results, go to www.albertahunteraccess.com.

Bale wrap and silage plastic recycling is getting easier in Lethbridge County!

Agricultural producers in the Lethbridge County area can recycle stretch bale wrap for silage and hay bales, as well as tarps, covers, and bags/tubes for silage, free of charge. This fall and winter, Cleanfarms, the stewardship organization that collects used agricultural plastics for recycling, is testing free on-farm pickup of these plastics within and around the county.



Mobile ag plastic compactors for on-farm pickup of bale wrap and silage plastic for recycling in Lethbridge County. Source: Cleanfarms

Burning these materials is illegal in Lethbridge County.

plastic into lengths that are roughly 4' wide.

3. **Fold into 4' squares** – Fold the 4' lengths into 4' squares.

4. **Store** – Stack folded squares of plastic in a tidy pile and place

something weighted on top to prevent them from blowing away.

Note: if you use both types of plastic in your operation, please keep them in separate piles. Each plastic type goes to a separate recycling facility, so they need to be kept separate, or they are unrecyclable.

4. A Cleanfarms collection contractor will pick up the plastic on a set day each month (TBD). Once prepared, ensure that the plastic is easily accessible by a truck pulling a 22' trailer. The material must be located at one central location on the property for pickup. On pickup day, ensure that someone is available to provide loading assistance to the driver.

This project is funded in part by the Government of Canada through Agriculture and Agri-Food Canada's Canadian Agricultural Strategic Priorities Program (CASPP), a \$50.3 million, five-year investment to help the agricultural sector adapt and remain competitive.



The site project is led by the not-for-profit Agricultural Practice Research Group, from 2019-2022, funded by the Government of Alberta and the support of the Alberta Barley and Alberta Wheat Commissions.

How it works:

1. Attend a short information session at 10 am on November 22 at the Lethbridge County Ag Service Shop (refreshments and snacks provided).

2. Contact Matthew Wells (mwells@lethcounty.ca) to get on the pickup list.

3. Prepare your plastics for recycling:

Stretch bale wrap for hay and silage bales (white, blue, green, purple stretch plastic)

1. **Cut** – If needed, cut the bale wrap into manageable pieces.

2. **Shake** – Shake to remove large pieces of debris (hay, mud, ice).

3. **Fold** – For ease of storage and pickup, fold the plastic into manageable 4' square pieces.

4. **Store** – Stack pieces of plastic in a tidy pile and place a weight on top to prevent them from blowing away.

Covers, tarps, and bags/tubes for silage (black and white plastic)

1. **Shake & lay flat** – Remove debris (spoiled silage, mud, ice); shake the plastic as you lay it flat.

2. **Fold into 4' lengths** – Fold the flat sheet of



(L to R): Kimberly Cornish, Food Water Wellness Foundation; Dr. Melanie Wowk, Chair of Alberta Beef Producers; Minister Marie-Claude Bibeau; Reg Schellenberg, President of Canadian Cattle Association

Living Labs brings research to reality

Alberta Beef Producers (ABP) is pleased to be leading a project that will benefit Alberta's beef, forage, and cropping sectors through collaboration, innovation, and research.

In July, The Honourable Marie-Claude Bibeau, Minister of Agriculture and Agri-Food, announced the expansion of Agricultural Climate Solutions – Living Labs program, including an initiative led by ABP.

The Living Labs program was developed as part of the Government of Canada's work to reach net zero emissions by 2050. The goal of Living Labs is to "accelerate the development and adoption of sustainable practices and technologies by Canadian farmers," based on three core principles:

1. Focusing on farmers' needs.
2. Broad and diverse partnerships.
3. Testing in the real-life context.

"We typically think of these kind of things as research, but really it's extension. It's taking and putting these practices on the landscape and making them work in reality. And that whole co-development piece is a beautiful part of the extension with this, and collecting real-life, farm-scale data." – Sheri Strydhorst, Alberta Barley and Alberta Wheat Commission.

Collaboration is key

For the **Alberta AgriSystems Living Lab (AALL)**, the application alone required collaboration between all 16 partners, including agriculture commissions, Indigenous communities, non-governmental organizations, research institutions, and private industry.

That collaboration will continue as individual projects develop on farms and ranches participating in the program.

What it will do

The goal of AALL is to co-develop beneficial management practices (BMPs) that work on-farm, offering real value to the environment and to producers. That means working directly with experts to determine what BMPs a producer might be interested in implementing on their operation and determining how best to undertake that implementation for each individual operation. Preferably, these will be practices that improve profitability or productivity, while also demonstrating some potential environmental benefits, such as improving carbon sequestration or reducing greenhouse gas emissions (GHGs).

BMPs will focus on the following key areas:

- crop rotations and cropping systems,
- land use changes,

- grazing management,
- livestock feeding,
- nutrient management, and
- increasing carbon storage on the whole farm.

"Ideally we'd like to see some of these practices spread beyond our core participants and out into the wider community across agricultural producers in Alberta," says Karin Schmid, ABP's Beef Production and Extension Lead.

"And so part of the socio-economic analysis is looking at those adoption levels and how they change and may be impacted by the Living Labs Program. And if we see... that peer-to-peer networking and learning experiences having an impact, I think it might even revolutionize some of the models and some of the ways we think about doing extension and adoption work within agriculture."

Where it's at now

Since receiving approval, the ABP-led initiative has hired contract staff, including Brian Karisa as the Director, and Adrienne Herron as Knowledge Translation and Transfer (KTT) and Engagement Lead. Kristine Dahl will be an Engagement Facilitator located in the Edmonton/Central and Lethbridge/South Regions.

The Initiative is also now branded, with its name, a logo, and its own website: agrisystemsll.ca.

Next steps

Next, project staff will work to organize information and recruitment sessions, with the goal of recruiting approximately 50 beef, forage, and cropping producers as core participants.

"There's lots of opportunity for producers if they've been thinking about trying something but are not sure where to start," says Schmid. "That's where our researchers and their expertise can really fine-tune that and set them up for success right out of the gate."

Producer participants will be primarily located in three geographical regions: the Peace region, Edmonton/Central region, and Lethbridge/South region.

If you're interested in participating in the project, or have further questions, please visit agrisystemsll.ca and sign up!

"We have a really important opportunity here to be able to demonstrate to the federal government what is feasible and what is not feasible, and where extra incentives might be needed." – Karin Schmid, ABP

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FUNDING OPPORTUNITIES FOR ALBERTA FARMERS



CAP Funding 2021-March 31, 2023



Efficient Grain Handling Program

- Grain handling system components that significantly improve energy above standard configuration are eligible under the program
- EFP required
- The program provides grants on a cost-shared basis (50% grant and 50% Applicant) to cover Eligible Expenses for approved Projects up to a maximum of \$100,000 per Applicant.

• **The Program has reached its allocated program budget for the remainder of the year. Applications are still being accepted, reviewed, and placed in a queue at this time. If additional funding becomes available, requests will be reviewed in order of the queue. [Deadline for applications is November 30, 2022.](#)**



Farm Technology Program

- 2021-2023 program-funding maximum is \$48,000 for Farm Technology and \$2,000 for Farm Security for a total of \$50,000 over the program term.
- Grant funding cost share is 50% of eligible expenses (50% grant and 50% Applicant)

• EFP required

- Agriculture specific drones are eligible (e.g., Multispectral imaging drones, Thermal imaging drones)
- Purchases made before the program receives the application are ineligible for reimbursement

• **The Program has reached its allocated program budget for the remainder of the year. Applications are still being accepted, reviewed, and placed in a queue at this time. If additional funding becomes available, requests will be reviewed in order of the queue. [Deadline for applications is November 30, 2022.](#)**



Water Program

- Cost-shared at 25% grant and 75% Applicant, except for special incentives at 50% grant and 50% Applicant
- EFP not required

• There are two streams under the Water Program:

1. On-Farm Irrigation Projects
 - Cost-shared up to a maximum of \$25,000 per Applicant fiscal year of the program
 - One project per one parcel of land
2. On-Farm Water Supply Projects
 - Cost-shared up to a maximum of \$25,000 (\$5,000 for standard incentive projects and \$20,000 for special incentive projects) for the period April 1, 2018 to March 31, 2023

SCAP Funding April 1, 2023, to March 31, 2028

- Developing the cost-shared Resilient Agriculture Landscape Program (RALP). Are still working on details as to what that will look like.
- **More information will become available as we approach the New Year.**

On-Farm Climate Action Fund

Total amount available for producers is \$75,000 from all sources

RDAR

- Nitrogen, Cover Crop, and Grazing Rotation
- 1 application per legal entity
- (Year 1) Applications open August 4, 2022, close November 7, 2022
- (Year 2) Applications open February 13, 2023, close November 30, 2023
- Eligibility – Active producer with minimum \$25,000 gross farm income
- \$75,000 over life of program (85:15 match with no in-kind payments)
- BMP new to farm or field
- Sign off by Professional Agrologist (PAg) or Certified Crop Advisor (CCA)
- Post Project Audit
- Taxable Income
- <https://rdar.ca/wp-content/uploads/2022/01/OFCAF-Program-Guide-final.pdf>
- [Canola Council of Canada](#)

- Nitrogen only
- 1 Application per farm
- Applications open August 17, 2022
- Eligibility – open to canola growers in Alberta
- \$6,000 per year max \$12,000 over life of program (85:15 match with no in-kind payments)
- BMP must be new to farm or field
- Sign off by 4R certified PAg or CCA
- Post project audit
- Taxable income
- <https://www.canolacouncil.org/4r-advantage/program-guidelines/>
- [Canadian Forage and Grasslands Association](#)
- Rotational Grazing only
- Applications accepted continuously
- Eligibility – Active producer with minimum \$10,000 gross farm income
- 1 Application per project
- \$20,000 per project per year (70:30 match in kind eligible)
- \$75,000 over life of program
- BMP must be new to farm or field
- Sign off by PAg or CCA
- Post project audit
- Taxable income
- Mentorship and training available in support
- <https://www.canadianfga.ca/projects-projects/ofcaf-funding/>
- [Farmers for Climate Solutions](#)
- Nitrogen, Cover Crop, and Rotational Grazing
- Training and peer to peer learning only
- <https://farmersforclimatesolutions.ca/mentorship>
- [ECOCERT Canada](#)
- Cover Cropping and Nitrogen Management
- Eligibility – Certified Organic Farmers across Canada
- <https://www.ecocert.com/en-CA/home>

Matthew Wells, ASB/EFP Technician: 403-634-0147 or mwells@lethcounty.ca

Did You See It!

With contributions from CTV

CTV's mega-hit original series [THE AMAZING RACE CANADA](#) was back. After crisscrossing the country and covering more than a quarter million kilometres around the world during the past seven seasons, [THE AMAZING RACE CANADA](#) made its triumphant return **Tuesdays at 9 p.m. ET/PT** on CTV, [CTV.ca](#), and the CTV app, on **July 5.**

Hosted by Olympic Gold Medallist [Jon Montgomery](#), Season 8 of Canada's favourite summertime adventure continues as an all-new cast of racers head to the starting line to push themselves out of their comfort zones in a non-stop, action-packed expedition. Teams competing this season include an Olympian, a JUNO Award-winning singer, teachers, personal trainers, a firefighter, a comedian, entrepreneurs, a sales representative, a marketing expert, a motivational speaker, and Broadway performers.

Faced with the most intense race of their lives, the teams tackle various challenges with the hope of winning two first-ever Chevrolet Silverado ZR2's, a once-in-a-lifetime trip for two around the world courtesy of GURU Organic Energy, a \$250,000 cash prize, and the coveted title of [THE AMAZING RACE CANADA](#) champions.

Episode 802 Synopses:

THE AMAZING RACE CANADA (Season 8)

Episode 802: "Goatageddon"

Teams race to Lethbridge, Alta., where some race teams decide to give a hoot, while others follow the herd. Later, racers face reality and put their rhythm to the test before making it to the mat.

Scan the QR Code to visit the website!



Photos courtesy: CTV



Episodes of Season 8 of [THE AMAZING RACE CANADA](#) are also available to watch on demand at [CTV.ca](#) and/or available to stream on [Crave](#).



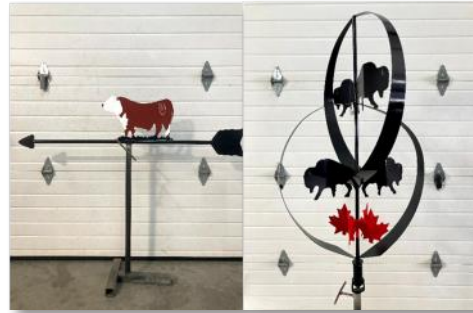
Local Business Spotlight

Art That Spins

Submitted by: Art That Spins

We are a small business located between Claresholm & Barons on Highway 520. We make Weathervanes and Whirlygigs to beautify yards and gardens or shops and barns.

We have been making Weathervanes and Whirlygigs for the past 9 years. We also fabricate custom gates and metal signs. Weathervanes indicate the direction of wind and they come with either a roof mount or 7-foot steel post. The standard sizes are 2 or 4 feet. Whirlygigs start at 2 feet and go up to 6 feet and come with a 7-foot steel post. Whirlygigs are good for our windy conditions because



they do not spin wild in strong winds since there is almost as much resistance as force.

The website is "art-thatspins.com". Many of our items are shown there. We are open most days, and have many items on display for purchase. Custom orders are welcome. If you have a photo or you can describe it, we can usually make it. Delivery time varies; however, most items can be delivered in 10-14 days. Our phone number is 403-650-1226.



Have you heard of the local Strawberry U-pick new to the county?

Submitted by:
Gary Vander Waal at Keep Dreamin' Acres

Kee Dreamin' Acres is located approximately 4 miles east of Picture Butte on highway 519. We started this little farm with the dream to raise our children and feed our family growing produce etc. using regenerative farming practices. Our goal is to raise livestock, produce, berries, and garlic without the use of chemical fertilizers and minimal sprays.

On our little farm we grow both June bearing strawberries as well as day neutrals which are a cool season berry that

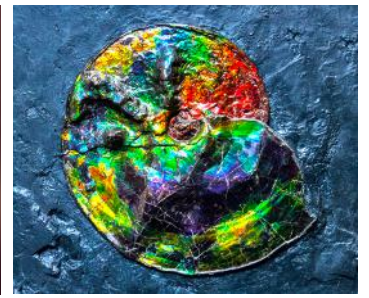
thrives early in the season and late, all the way to freeze up. The berries are grown with all natural fertilizers and sprayed for bugs when necessary for an end result of delicious healthy fruit. We also grow some assorted vegetables and are trying to grow raspberries and blackberries. If you are looking for fresh outside raised meat, we have that too! Chicken, turkey, and pork all slaughtered either in an inspected facility or in a facility of your choice. Book early as this meat is getting great reviews!

Here at Keep Dreamin' Acres we grow seed garlic (you can eat it too) that is tested and cleared of disease for peace of mind at planting knowing you are putting quality seed into



the ground. We currently grow four varieties of hardneck garlic, Creme de la Rasa, Musik, Purple Russian, and of course Russian Red, the most common variety.

Come out next summer and check out our U-pick and be sure to take the children for a tour of the animals! Our hours are Monday-Saturday 8-12 or by appointment. You can follow us on face book for further updates and to see how the season is progressing.



Cottonwood Records

Submitted by:
Clayton Varjassy
at Cottonwood Records

My brother (Joel) and I created Cottonwood Records Christmas of 2016 in Coaldale. We had just finished converting the garage into a recording studio and were brainstorming how to best utilize the space. Joel had been getting into videography and already had a strong background in audio and photography. Christmas Day we decided we would film and release our first video, Cottonwood Records Holiday Giveaway.

The premise we came up with was that we would feature local artists by recording a song with them in the studio, and filming an accompanying video. It just so happened that our childhood friend, Shawni Rae, was in town for Christmas. We had actually worked with Shawni in 2009 to produce two videos for covers of Wonderwall and Hallelujah at Louis Studios, which was Joel's personal studio at the time, so this was the perfect fit for us to launch our Monthly Featured Artist.

We went on to produce a lot of content for a variety of artists from the area. Fast forward to 2018 and we felt that we were starting to gain momentum with our videos, and Telus STORYHIVE had just announced a documentary and music video round of their funding. We were successful in both and ultimately ended up producing the music video Streets for Moonrunner83 and Megan McDuffee as well as the documentary, Ammolite: Gem of the West.

We had incorporated Ammolite into a couple of our past videos, including Nicole Hughes' Supernova. Ammolite is a gemstone that is the shell of 70-million-year-old Ammonites that lived in the Bearpaw Sea during the Cretaceous period. Despite Ammonites being the most common fossil in the fossil record, found on every continent all over the world, only a select few species found in the foothills of the Rocky Mountains along the St. Mary River in Alberta, Canada, developed the gemstone known as Ammolite. Ammolite was officially recognized as a gemstone in 1981, making it the world's youngest gemstone.

The story of Ammolite and its rise to interna-

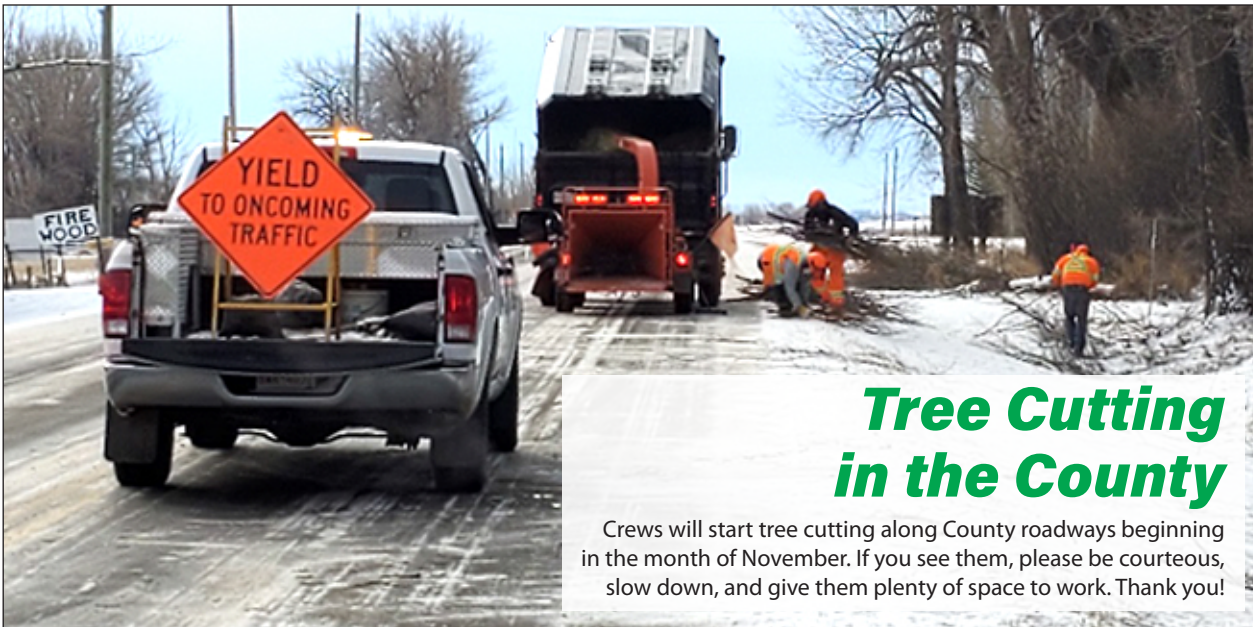


tional stardom is an interesting one, and given its scarcity, proximity and cultural relevance, this was a no-brainer for us to pitch to Telus STORYHIVE. We spent about 5 months filming two of the world's largest producers of Ammolite, Korite and Enchanted Designs. We also filmed surface miners, Wes and James Eagle Child from Eagle Child Ammolite on the Blood Reserve. We worked with Troy Knowlton and Kalum Teke Dan to tell the story of Iniskim, or Buffalo Stone, with accompanying imagery. We worked with Mark Maxwell, one of our first monthly featured artists, to produce an original song, "Buffalo Stone" for the documentary. We interviewed a variety of geologists and industry experts and filmed all over Southern Alberta to bring the story of Ammolite to life.

In 2020 my wife and I built a house and Joel moved to Calgary. We continue to work together on video projects, but Cottonwood Records, as it were, has been on a bit of a hiatus. However, we are in the finishing stages of a new 1300 square foot studio, and will be returning to our roots in 2023 with some new content. Keep an eye on www.CottonwoodRecords.com for more. If you haven't checked us out yet, we have a fairly extensive back catalogue with a variety of artists across multiple genres.

We do offer audio and video production as a service to Lethbridge and area as well as Calgary and area. If you like our work and are interested in collaborating, contact me by e-mail at clayton@cottonwoodrecords.com with some information about the project idea you have in mind.

Pictures from top to bottom: Nicole Hughes - Supernova (Ammolite). Ammolite with Ammolite Shell. Shawni Rae - Introduction (Cottonwood Records Monthly Featured Artist).



Tree Cutting in the County

Crews will start tree cutting along County roadways beginning in the month of November. If you see them, please be courteous, slow down, and give them plenty of space to work. Thank you!

Fall reminders for confined feeding operators

Submitted by:
Natural Resources Conservation Board

Manure spreading season

Fall is manure spreading season for many producers, including confined feeding operators, and the Natural Resources Conservation Board (NRCB) wants to remind you of a few things.

Manure application

Under the Agricultural Operation Practices Act (AOPA), you must incorporate manure or compost within 48 hours of the start of application on cultivated lands. If you apply on forage or direct seeded lands you don't have to incorporate but a setback distance of 150 metres to neighboring residences is required.

Water bodies and water wells

Manure run off must not enter a common body of water and section 24 of the Standards and Administration Regulation of AOPA indicates the setbacks below to prevent this from happening.



You must not apply manure, composting materials, or compost:

- within 10 metres of a common body of water if subsurface injection is used
- within 30 metres of a common body of water if applied to the surface of the land and incorporated within 48 hours, or
- within 30 metres of a water well.

When applying manure or compost without incorporation, keep in mind that the setback distances to common bodies of water increase as the average slope of the land towards that common body of water increases.

Soil testing

Fall is also a good time to soil test any land that will be receiving manure this fall or next spring. This is also a requirement in AOPA for anyone applying more than 500

tonnes per year of manure or compost.

Spreading on frozen or snow-covered land

Don't do it.

Both the NRCB and Agriculture, Forestry and Rural Economic Development strongly discourage winter spreading of manure or compost due to the increased potential for run off to contaminate surface water. In fact, confined feeding operations that have at least nine months of manure storage **are not allowed** under AOPA to apply manure or compost on frozen or snow-covered land **unless** prior permission is received from an NRCB inspector, or the NRCB issues a notice allowing spreading due to weather conditions such as early onset of winter or delayed harvest.

Complaints

If the NRCB receives complaints about manure spreading, inspectors will conduct a site inspection or contact the operator by phone to follow up.

Construction planning for next year

As harvest wraps up, fall is a great time to look ahead to next year. If you're planning to build new, or expand existing facilities at your confined feeding operation be sure to check with a Natural Resources Conservation Board (NRCB) approval officer before you begin to find out whether you need a permit.

Do you need a permit to build?

Unauthorized construction at a confined feeding operation is a serious offence under the Agricultural Operation Practices Act (AOPA). The Act requires operators to obtain a permit before constructing or expanding a manure storage facility or manure collection area at a confined feeding operation, i.e. any facil-

ity that collects or stores manure, such as barns, liquid manure storage (lagoons), livestock pens, runoff control structures, etc. If in doubt, call the NRCB to speak with an approval officer.

Operators who construct or expand a facility without the appropriate permit may be required to depopulate or dismantle the facility and may face prosecution. If you need a permit for your construction project, get your application in as soon as possible. This will help to minimize any delays so you can be ready when the next construction season begins. The NRCB typically takes about 65 working days to process an application after it has been determined to be complete. Sometimes more complex applications may take longer to process.

Post-construction inspection

After completing permitted construction and before placing livestock or manure in the facility, the permit holder is required to contact the NRCB to schedule and carry out a post-construction inspection. The inspection will assess whether the facility was constructed according to the terms and conditions of the AOPA permit. If the facility meets the terms and conditions of the AOPA permit, the NRCB will issue a letter allowing use of the facility.

For more information on these matters or anything else related to AOPA, please contact the Lethbridge NRCB office at 403-381-5166, email us at info@nrcb.ca, or check our website at www.nrcb.ca

Cleanfarms' ag chem jug recycling program is changing!

1. Collection sites are transitioning from municipal to retail locations

The Cleanfarms <23L container collection program is gradually changing to align it with other provinces, enabling farmers to bring these empty and rinsed containers back to their local agricultural retail outlets. The transition to ag retailers is being phased in over three years.

The transition shifts the responsibility to accept empty containers from the municipality to the ag industry. It also simplifies farm disposal of crop input packaging since many ag retailers already collect other materials like drums, totes, and seed, pesticide & inoculant bags for recycling with Cleanfarms.

In Lethbridge County, we no longer accept empty, rinsed agricultural chemical containers at the Picture Butte transfer stations, and all other stations will be phased out between now and 2024. Your local ag retailer will be a primary drop-off location for these containers. Many ag retailers are already accepting them for recycling; however, before returning them to your local retailer (where you purchased them), please call to see if they have begun taking them.

What to know: Get a free Cleanfarms collection bag when the product is picked up or delivered, and then:

1. Rinse

- Use a chemical handler or a pressure nozzle to triple-rinse the containers to ensure no product is wasted

2. Remove & Bag

- Remove paper booklets, and discard
- Place rinsed containers in a Cleanfarms collection bag and tie closed

3. Return for recycling

- Return rinsed and bagged jugs to your participating ag retailer

4. Seed treatment containers

- Caps are to remain securely ON
- Place in a separate collection bag (seed treatment containers are processed separately from chemical containers and need to be kept in their own bags)

More info is available at <https://cleanfarms.ca/mb-ab-jug-transition/>

2. Large volume ag plastics & packaging pickup is now available!

Since 2016, Cleanfarms has been collecting materials directly from certain high-acreage farms across Canada. As part of our mission to provide convenient and efficient recycling programs to Canadian farmers, we are now extending the offer to pick up ag plastics for recycling from high-volume growers across Western Canada. Best of all, this service is available to growers that meet volume requirements, free of charge.

To be eligible for this service, growers must have (or be willing to accumulate) a minimum quantity of used agricultural waste materials that Cleanfarms recovers for recycling and/or safe disposal.

For more information on minimum quantity requirements and large volume collection, please visit <https://cleanfarms.ca>.

Do you have questions? Cleanfarms wants to hear from you. Please email info@cleanfarms.ca or call 1-877-622-4460.

Thank you for recycling with Cleanfarms!



The pilot project is led by the multi-stakeholder Agricultural Practices Recycling Group. Funds have been granted by the Government of Alberta and are administered by Alberta Seed Producers.



Unloading rinsed, bagged containers at ag retailer.
Source: Cleanfarms



Lethbridge College agriculture research updates

Lethbridge area farmers were not the only ones filling grain bins during harvest.

Researchers at Lethbridge College's 385-acre research farm, located minutes east of the city, are breaking in their new state-of-the-art bin yard and grain dryer facilities, installed in 2021 and 2022.

The three new 20,000-bushel bins are now filled with grain courtesy of a local farm, who harvested damp wheat for a study aimed at increasing the efficiency of grain dryers. The project is funded by the Alberta Wheat Commission, SaskWheat, Alberta Innovates, Results Driven Agriculture Research (RDAR) and Canadian Agriculture Partnership (CAP).

This drying project is one of many being run by the college's Advanced Post-Harvest Technology Centre, who has been conducting their research on farms or in bench-sized experiments for the past couple of years. The post-harvest technology team is also finalizing an on-campus lab space that will support projects focusing on retaining food quality and reducing waste in the processing and storage of specialty and commodity crops.

Non-destructive quality testing of potatoes

Saving time, labour, and most importantly good potatoes.

One of the first RDAR-funded projects being run out of the new on-campus post-harvest lab is using cutting-edge near-infrared (NIR) hyperspectral imaging technology to test potato quality.

Currently, potatoes are cut open on the production line to see if there are defects as part of random testing. This is time-consuming and results in unnecessary food waste.

Dr. Chandra Singh, Senior Research Chair for the Advanced Post-Harvest Technology Centre, says that assessing potato quality with hyperspectral cameras could help potato processing companies operate more efficiently.

"If successful, this technology could detect internal defects, greening, specific gravity and sugar content, allowing production lines to sort out poor-quality potatoes without having to cut them open," says Singh.

Subsurface drip irrigation

Subsurface drip irrigation (SDI) is commonly used in vineyards, vegetable production and occasionally row crops.

However, researchers in the Mueller Irrigation Group at Lethbridge College are working to see if the practice can be used to grow conventional field crops right here in southern Alberta.

What started as a small research project in a couple of custom boxes inside the college's on-campus innovation space has grown into a field-scale study, with 15 acres of SDI driplines installed on 21 individually controlled zones at the college's research farm in the early summer of 2021. Plots on this land in 2022 investigated the impact of irrigation and fertigation through the SDI system in wheat and canola.

Dr. Willemijn Appels, Senior Research Chair with the Mueller Irrigation Group, says they have learned a lot, even though this project is only just beginning.

"While injecting liquid fertilizer into the rootzone would be expect-



ed to improve nutrient uptake, the effects actually vary per crop," Appels says.

She adds that weather conditions also still play a significant role in the water and nutrient use efficiency of SDI systems.

Precision irrigation

Imagine if an irrigation pivot could detect how much water was in the soil and automatically change the amount of water it was applying.

While that isn't quite possible yet, researchers at the college are hoping microwave radiometer technology placed on top of the pivot can get them another step closer to making it a reality.

Thanks to a partnership with B.C.-based Skaha Labs, which manufactures the technology, and the University of Alberta, researchers are working on mapping the moisture in an entire area instead of spots where sensors are installed in the ground.

This more precise measurement can lead to more precise irrigation and increase water use efficiencies.

In the near future, they hope this research will enable farmers to make variable irrigation rate changes on the fly, based on soil and crop needs.

Appels adds that ideally, in the future, the sensors would be used to estimate soil moisture conditions just ahead of the sprinklers.

"The observations would then be integrated with models and data from other sources, and the amount of water the sprinklers put on the crop would be adjusted while the pivot is moving."

Funding for the research project is provided by RDAR for the three-year project.

Reducing the environmental footprint of potato production

Alberta is one of the largest producers of potatoes in the country, with a lot of those acres being planted right here in southern Alberta.

Currently, producers use fall land preparation practices that include irrigation, fertilizer application, cultivation and bedding of the field.

Fall land preparation before potatoes is important, but it also comes with the risk of erosion and greenhouse gas emissions.

Research being conducted by the college, funded by RDAR and CAP, is looking at how to reduce the environmental footprint of this process.

This research project is being led by Dr. Rezvan Karimi, Research



Scientist with the Mueller Irrigation Group. They are working to determine the effects of different land preparation practices and cover crops have on potato yield, soil nutrient levels and nitrous oxide emissions.

It is the first known project in Alberta to study the effect of potato bedding on soil erosion and emissions.

Greenhouse

The college is now home to a new 10,000 ft² greenhouse and headhouse, the Centre for Sustainable Food Production.

This facility, which has state-of-the-art systems, is connected to the Aquaculture Centre of Excellence, which allows the research teams to conduct greenhouse research utilizing aquaponics, conventional hydroponics, or both.

Excitement is also building around a unique innovation challenge in which Lethbridge College researchers and their partners at Sunterra Greenhouse and Meteor Systems are exploring new greenhouse technology to maximize the number of strawberries that can be grown per square metre.

The Homegrown Innovation Challenge, funded by the Weston Family Foundation, will award funding to teams across the country to find ways to support Canada's berry industry and reduce its dependence on imported fresh fruits and vegetables.

Engaging with our teams

It has been a bountiful harvest for researchers at Lethbridge College as the number of research projects has grown exponentially over the last two years and will only get bigger.

Agriculture applied research at the college focuses on four key areas: post-harvest technology, irrigation science, greenhouse production and aquaculture/aquaponics.

Farmers and industry are always welcome and encouraged to be part of the research at the college and can find more information at www.lethbridgecollege.ca/carie.

Could rice be the next crop in southern Alberta?

Probably the last place one could imagine growing rice would be southern Alberta, but, as one University of Lethbridge researcher is finding out, it may not be outside the realm of possibility.



Dr. Michele Korschuh, a research associate in the Department of Biological Sciences, in collaboration with Galaxy Ag Ventures and Farming Smarter Association, is examining the

potential for rice to be a value-added crop in this region. Rice is a gluten-free food staple that provides valuable byproducts like rice starch, protein and oil. Galaxy Ag Ventures is a Calgary-based company involved in strategic investment and product development in agri-foods. Farming Smarter is a farmer-led, not-for-profit organization based in Lethbridge dedicated to driving innovation at the farm level.

“One of the big questions is how you are going to grow rice in Alberta,” says Korschuh. “I wasn’t all that confident when they first approached me, but they did bring some technology from Korea called seed film cultivation (SFC). It’s essentially a biodegradable plastic layer that they attach the seed to and lay over moist soil.”

Korschuh explains the SFC helps warm the soil and prevent moisture loss, as well as prevent weeds from taking root. Alberta’s climate tends to be cold and dry with a short growing season. However, as rice is grown in some mountainous regions, some varieties are

adapted to lower temperatures and shorter seasons. Also problematic are Alberta’s long summer days because rice likes shorter days to flower. And irrigation will be needed; Korschuh says rice needs about the same amount of water as a potato crop.

After a short-term pilot project this spring, the experiment has now moved to the field. With Galaxy Ag providing the funding and Farmer Smarter the land, technological expertise and equipment, a ULehbridge undergraduate student funded through Mitacs was hired to work on the project. Three methods for planting were used: the SFC technique, transplanting plants grown in a greenhouse, and direct seeding. The researchers also opted to try two types of irrigation: overhead pivot and subsurface drip.



that both B.C. and Ontario have successfully grown rice. So, we know rice can grow in Canada; what we don’t know is if rice can grow in Alberta because our conditions are a little bit different.”

Korschuh is also continuing her research into blackleg of potato. Blackleg, one of numerous seed-borne diseases that have been identified in potato production around the world, is caused by *Pectobacterium* and *Dickeya* bacteria.

“All three methods of planting have been successful so far,” she says. “What we don’t know is if we can get them all the way to rice seed production and maturation by fall. This is really early steps and the nice thing is

Korschuh and her collaborators, **Dr. Larry Kawchuk and Jonathan Neilson** from Agriculture and Agri-Food Canada, are using a multi-pronged approach that includes an information campaign outlining best practices for seed growers and sharing findings from their research.



The researchers are also investigating rapid diagnostic tools available on the market and possibly developing new additional tools to detect blackleg early. Such tools would allow producers to

obtain a diagnosis when they see a suspicious plant in the field instead of having to wait for laboratory results. In addition, the scientists are examining the potential of biocontrol agents — bacteriophages and endophytes.

The group has received additional funding from Results Driven Agricultural Research (RDAR) to expand the work to include genetic analysis of the pathogen causing blackleg and different potato varieties to determine if there’s a relationship between susceptibility in the host and aggressiveness in the pathogen.

“Research provides valuable information to producers and ag businesses to support their decision making,” says Korschuh. “Research also helps reduce risks associated with changes in agricultural practices.”



University of
Lethbridge

PUBLIC Professor
SERIES

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ulethbridge.ca/artsci/public-professor-series

Do you know your Invasive Weeds?

How well do you know your invasive weeds? Below are 13 invasive weed species that have been found here in Lethbridge County. Can you name them all? The photos at the bottom of the page are clues too, for #7, 8, 9, and 12. **Take a photo of your completed crossword and e-mail it to mwells@lethcounty.ca by November 22 to enter to win a shirt courtesy of Alberta Invasive Species! 5 winners will be drawn.** Answer key will be posted on our social media page in the coming weeks.

Are you stuck on a word and need a little more help? Scan the QR code below to view AISC's fact sheets of invasive weed species here in Alberta.

Keep an eye out on our social media pages for various agriculture-related information including invasive weed fact sheets, beneficial and pest insects, CAP funding information, tree information, and more!

Across

4. a long-lived perennial that reproduces from its extensive creeping root system and by seed, has yellow flowers, and contains a milky coloured latex within all its plant parts that can poison livestock and cause skin irritation on humans

8. a member of the Nightshade Family. Has pale yellow flower heads with deep purple veins, all parts of this plant are poisonous to humans and animals when ingested, and was used in ancient religious rites because of its hallucinogenic properties

9. a member of the Aster Family. Has purple flowers with barbs that attach to clothing and hair/fur, facilitating seed dispersal. The roots of these plants can grow 1 m long and 2 cm across. Was used during the Middle Ages as a vegetable and the roots are still favoured in Asian cooking

10. a short-lived perennial that reproduces both by seed and creeping roots. The flowers are bright yellow resembling snapdragon flowers. Is difficult to eradicate once established due to the extensive root system

11. a member of the Figwort Family that have bright yellow flowers that are produced in 20-50 cm spike-like racemes. Is commonly referred to as mother natures toilet paper

12. a member of the Aster Family with white (can occasionally be pink) flower heads and taproots that exude chemicals, inhibiting root growth of other plants. Is highly competitive and can establish quickly on disturbed sites and invade undisturbed plant communities. This species is well known due to their degradation of large tracts of rangeland in northwestern US and parts of Southern BC.

13. a perennial flower that can become self-fertile in the absence of pollinators and still produce seeds. Has nodding light purple flowers that are composed of 5 sepals and 5 petals. Can reproduce both by seed and creeping rhizomes

Down

1. an annual grass that reproduces by seed only. Was introduced via chip ballast, contaminated crop seed, packing materials (straw), and was once used in reclamation mixes because of its

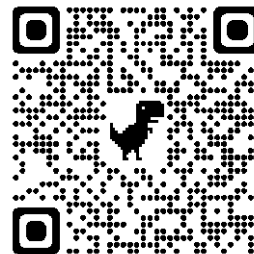
ability to establish on dry, gravelly soils. The flowering heads, when mature, will turn purple. Is adapted to frequent fire regimes

2. introduced as an ornamental, the flowers are daisy-like, composed of a yellow central disk surrounded by white petals. Leaves are alternate and very finely divided into short segments (carrot-like) and odorless when crushed

3. a perennial that reproduces by seed only, this flower is used extensively by the flower industry as bouquet filler, in particular weddings. Having white flowers, it is found throughout North America

5. a biennial or short-lived perennial that is a member of the Mustard Family. Has flowers that can be white, lavender-pink, or purple with 4 petals. Leaves are alternate, lance-shaped with hair on both sides, and have serrated edges

6. a perennial forb that reproduces by both seed and short rhizomes, has yellow button-like flowers that occur in dense flat-topped clusters at the top of the stem, and has alternate leaves



that are deeply divided into numerous leaflets, and has been used as insect repellent

7. this invasive plant develops a long, stout, black taproot (sometimes 2 or more feet long). Produces low growing rosettes the first year, flowering its second year. Flower buds are reddish-purple, becoming bright blue upon opening



Photo Credit: Alberta Invasive Species (8)



Photo Credit: Nicole Kimmel (12)



(7)



(9)



Using innovation to coexist with beaver populations

Submitted by:
Kirby England, You Betula Environmental Inc.

When you flush the toilet, you hope that the water and waste make their way downstream to a destination as intended. And in the same way, when Lethbridge County is looking to flush out your water treatment ponds near Shaughnessy to make way for more water and waste, you would also hope that the water has somewhere to flow easily downstream. However, when beaver have migrated upstream from the nearby watershed and have dammed the wastewater outflow channels preventing you from easily sending that waster downstream, it's time to find a solution; and quickly.

A common quick fix in these sorts of situations is to remove the beaver lethally and breach the dam by hand or with equipment. As a licensed trapper, and with the permission of the adjacent landowner, I was also given the option of simply killing the beaver. However, it's often not only a single beaver and the dam is repaired in short order and water soon ponded again. Further removal of beavers continues, and further breaching of the dam must follow. There is a cost in time, labour, fuel, and not to mention the ecological cost that comes from repeatedly disturbing the functioning wetland community that readily forms following the beaver's ecosystem engineering efforts. With up to two weeks of flows needed to drain down the Shaughnessy water treatment ponds, this trap-breach-repeat cycle wasn't the preferred option. Instead, I wanted to work with Lethbridge County to find a solution that would break the cycle of beaver removal and wetland disruption.

At this site especially, there was a further benefit of beaver damming and that is the up to 30X reduction in fecal coliforms to downstream waters that come from a series of beaver dams in place within a stream. In short, the beaver dams, and the ponds that form behind them, are another level of water treatment for the system; provided for free by the beaver. As a friend and colleague of many in Lethbridge County and elsewhere in southern Alberta that are downstream on the Oldman from Shaughnessy, I knew I could do more for the wetland, the wildlife, and the water quality than simply removing the beavers for



(Left to right) Completed and functioning pond leveller with Lethbridge County staff that helped with the install. Beaver pond and intact dam on the morning of the pond leveller install. Inlet cage end of pond leveller showing the double wall HDPE pipe protected by wire panels in an exclusion cage. (Below) Typical flexible-pond leveller design diagram



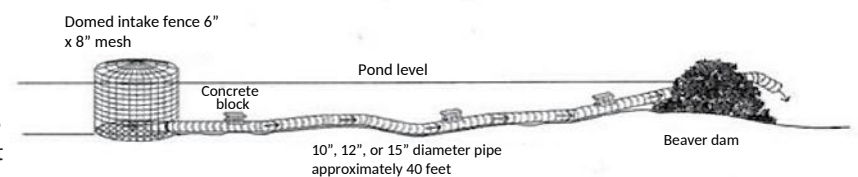
now only to do it again in the future when they returned.

The solution for this beaver flooding problem, and many others in similarly affected streams, wetlands, and human-made waterbodies across Western Canada, is what is known as a flexible-pipe pond leveller system (Figure 1). These devices, developed by land managers and refined in function over the last twenty or so years, are a relatively simple mechanism that drains water through a beaver dam to a depth that is tolerable to both the beavers and the adjacent residents. The intake is protected by a stout welded wire cage, and the double-wall high density polyethylene (HDPE) pipe conducts water through to the downstream side of the dam without the beaver noticing the flow and thereby being able to stop it. The outlet is firmly anchored in the dam and the desired water level set by the height of the outlet pipe; with a culvert properly sized, the pond will fill to the height of the outlet and no more.

With installs usually taking less than a full day (even shorter here thanks to some skilled operators from Lethbridge County; pictured) the pond leveller is a cost-effective solution to maintaining flows pro-actively rather than the traditional cycle of reacting with breaching every time when a beaver shows up and starts building onto previously breached dams. A follow-up visit the following spring is important to see how things settled over winter, and then you can expect in most cases up to a decade or more of relatively maintenance-free operation to keep the water level in the pond more or less consistent despite beavers attempts to build onto the dam.

Benefits of a beaver dam and the newly formed wetland are maintained, including habitat creation, water quality improvements, biodiversity benefits, and water storage. But beavers must live with a little less water and the adjacent human residents must live with a few more beavers. Given all that beavers can do for us, free of charge, it doesn't seem like such a bad deal for all. In addition to beaver dams on streams, a fence and pipe system can be used to protect culverts and other infrastructure where water movement is important but beaver damming could be a concern.

Although there are initial costs for pond levellers given the



costs of materials, the long-term savings especially once factoring in time and money saved on ongoing trips to kill beavers and breach dams, as well as the added environmental goods and services gained by maintaining beaver-caused wetlands, shows that Lethbridge County and others that have adopted these co-existence techniques are making a sound investment. In a world where lethal removal of nearly any animal has less and less social acceptance, the ability to non-lethally manage wildlife is a great public relations opportunity and gives further social licence to agricultural or municipal operations.

We should note that since this beaver flooding problem occurred within a human-built drainage for water from the treatment ponds, there was no regulatory approval required. However, in cases where beavers are damming within naturally occurring water bodies with fish or fish habitat, then there are project reviews that must be completed and properly submitted to the relevant authorities before an installation can be approved and completed. These approvals require detailed construction plans, identification of risks and planned mitigations, as well as descriptions of the aquatic environment. A skilled ecologist with construction experience is beneficial in these submissions and the turn-around time is usually a couple of months at most; shorter if in response to an emergency where flooding is threatening persons or property. You Betula Environmental Inc. is a full-service environmental management firm for these beaver flood and forage prevention installations and is always pleased to work with municipalities like Lethbridge County that are looking for environmentally and economically beneficial solutions. If you have a beaver flooding problem or would like to learn more about beaver co-existence techniques and the benefits of having the best dam managers on property that you own, manage, or enjoy then please reach out via email or our website (youbetula.com) for more information.



Native grasses and their importance to the Blood Tribe

Submitted by:

Nathan Mistaken Chief and Jarrett Panther Bone, Blood Tribe Lands Management

Targeted grazing is nothing new, but it has come to the forefront in recent years. The use of goats for targeted grazing to battle invasive species is one of the tools we use to battle Leafy Spurge. It is part of our integrated pest management plan. Herbicide is also used but in our more culturally sensitive areas we wanted to use goats to graze Leafy Spurge. We have found that our sages and sweetgrasses, that we traditionally use in our smudge and ceremony, were found in the same areas as Leafy Spurge. Herbicide was introduced and used before my partner Jarrett Panther Bone and myself (Nathan Mistaken Chief) took over the program 6 years ago. Herbicide was used in our first season and the first thing we noticed is the loss of sage as well as a decrease in Leafy Spurge. The decrease in spurge was good to see but it concerned us as to the loss of sage. Herbicide is still used in areas where infestation is rampant but a multi-tooled approach is what we do. We approach the problem holistically. This is a product of how we were raised. We look at the whole problem rather than getting tunnel vision and being stuck on one method. Since we have started, we have implanted new ways of data collection, new methods of treatment, community weed pulls, and we have joined with other Invasive managers in Southern Alberta in this battle against Invasive plants. We always pursue furthering our knowledge. We also love to share our knowledge as well. We have presented at a grassland restoration forum and were recently invited out to speak at a function for Lethbridge County. The use of different methods from other counties and municipalities are looked at and adapted to fit our needs. These partnerships have helped us further awareness and the importance of our work. The loss of our native grasses and plants would be devastating. This is where we started looking at targeted grazing.

The importance of our traditional plants is one of the main reasons we have started to adapt our methods to suit our needs. We approach things in a different way. It has to do with how we were brought up traditionally and the way we learn as native people. We are very hands on. Trial and error are our friend. This way of learning helps us approach our Invasive problem with a different lens. This has



helped significantly with our Integrative Pest Management plan or IPM. We have multiple tools that are used along with targeted grazing. Biological, Cultural and Chemical controls are used. Herbicide (Chemical) is used in areas where it is needed, The use of Leafy spurge beetles and targeted grazing (Biological). Our end goal is to stress the root system enough that we can re-introduce our native fescues, sages and grasses with the hopes that they will then outcompete Leafy Spurge. This is known as Cultural control. We have also found out the term of use is Restoration. These Integrated Pest Management plans will help us in this battle that we hold dear to our heart. As we are doing this for the generations to come. Jarrett and I have no land of our own. We do what we love, and this passion has helped us further our cause of awareness and education for our people.

The Blood Tribe was very fortunate to partner with Creekside goat company. They provide everything from transporting the goats to and from sites located here on the tribe. Also provided is a shepherd and dogs that look over and protect the goat herd while they graze on the Leafy Spurge. As we have a large land base and lots of ground to cover it is important to us the service the Creekside Goat company

provides. What also helps is the goats will decrease the litter which is the old growth and aerate the soil as they graze throughout the pasture. This allows more sunlight to reach the lower levels of vegetation. These movements to us mimic the Buffalo (Inii) that no longer roam these plains. The goats only target Leafy Spurge and seek this out before any other plants or grasses. The liver of a goat is what enables it to digest the toxic milky substance that will harm any other grazing animal. They are trained by Robert Finck of Creekside Goats to specifically target Leafy Spurge. We have been partnered with Creekside Goats Company for four years now, and just recently we partnered with Marilyn Neville of the Grassland Restoration Forum to help us with data collection and to monitor utilizing this bio-control method. Marilyn is putting together a manual for targeted grazing and we are grateful for the Blood Tribe to be included.

We would like to thank Blood Tribe Lands Management for giving us the tools needed to continue with our passion. Also, Kansie Fox who has never wavered in her support of us and Cloann Wells who goes to bat for us with our leadership. Without this support we would not be able to do what we do.

(Clockwise) BTLM crew along with S.W.I.M. members. Nathan Mistaken Chief and Jarrett Panther Bone in center. Co-op weed pull in Blood Tribe Timber Limits. Jarrett Panther Bone Watching Goat release. Goat targeting Leafy Spurge

1.

The first step of registration begins through the Alberta EFP website www.albertaeFP.com or by calling 1-587-200-2552 to receive over the phone assistance.

2.

Once registered, click on the confirmation email you received to fully activate your account. A technician will be assigned to you over the following two weeks. If you feel comfortable you can begin your online workbook right away

3.

If you have any questions, you can contact Matthew Wells at (403) 634-0147 or at mwells@lethcounty.ca to receive additional support.



This project has been made possible in part by the Government of Canada and the Government of Alberta through the Canadian Agricultural Partnership

**GET STARTED AT
ALBERTAEFP.COM**

What do cows and fish have to do with each other?

Submitted by: **Cows and Fish**

Hopefully they have something in common, or our organization's name would be a lot stranger. To us, these two seemingly unrelated animals are linked by their use of riparian habitats—those transitional green zones between water and the drier upland, also called floodplains or wetlands.

Cows and Fish (the organization, not the animals) specializes in riparian areas and riparian health. For 30 years now, we have been partnering with those who live, work, and play in Alberta's riparian areas. We often work with ranchers or those in the agricultural community, but also with municipalities, parks, acreage owners, and more. We learn from our partners and apply scientific concepts to on-the-ground issues. With this knowledge base, we provide input on riparian health and try to address concerns that people may have as they continue to steward riparian habitats.

Just like when you are ill at a doctor's office, when a riparian



area is unhealthy, it has symptoms. In a riparian area these symptoms present themselves through vegetation and physical features. We say a riparian area is healthy when there is lots of vegetation cover, few weeds or non-native plants, lots of woody species like trees or shrubs, and lots of regeneration of those woody species. Similarly on the physical side, health is shown when there is little bare ground, lots of roots from woody species along the banks, and few direct physical alterations like cattle trails or soil compaction.

We care about riparian areas because we know that when they are healthy, they are able to perform the functions and services that benefit habitat and water quality, as well as human well being. That is why we look at specific parameters to indicate health—because when those parameters are present, it likely means the riparian area is functioning properly. Lots of vegetation cover and little bare soil can help to prevent erosion and filter sediment and nutrients from runoff before it enters a watercourse. Woody vegetation can

help to stabilize banks with their deep binding roots. When soil compaction or other alterations are present, it can prevent plants from establishing and water from sinking back into the ground. Additionally, when riparian areas are healthy, they can provide habitat for wildlife on land and create shade and structure for fish in neighbouring watercourses.

Cows and Fish got its name through a recognition that grazing can be a compatible land use with riparian health. Cattle grazing can have the potential to negatively impact riparian areas, which can then impair our water (and the fish within it!), but it certainly does not have to. At Cows and Fish, we work with landowners and managers every day who make choices to keep their riparian areas healthy. They see the value of these actions, both for providing services today and into future generations. Thirty years later, cows and fish still have something to do with each other, and landowners are still partnering with Cows and Fish to share knowledge and care for their riparian areas.

Find out more about Cows and Fish, or sign up for our newsletter at <https://cowsandfish.org/>

Let's Talk Chicken

Family, care, and community values are first and foremost for Alberta's Chicken Farmers.

Submitted by:

Maria Leslie, Alberta Chicken Producers

From when chicks first arrive on farm to when they go to market, Alberta's 253 registered chicken (broiler) family-farms, ensure their flocks are well cared for.

On-farm third-party audited animal care and food-safety programs are followed by all Canadian chicken farmers.

For more information visit: <https://letstalkchicken.ca/animal-care/>

Avian Influenza in Alberta

The spring and fall of 2022 has been an unprecedented time for poultry farmers in Alberta. Avian Influenza (AI) brought forward new challenges and to report it bluntly, anxiety and heavy hearts for many farmers. On an ongoing basis farmers adhere to strict biosecurity protocols. During the ongoing AI outbreak these protocols have been heightened by actions such as, reducing traffic on-farm, moving birds indoors, washing vehicles and conducting further precautionary sanitation.

The Alberta Poultry Industry Emergency Management Team (APIEMT) continues to work closely with the CFIA and Alberta Agriculture, Forestry and Rural Economic Development, to expedite the investigation of suspected cases and mitigate the potential risk of further spread of AI in Alberta. At this time the cause of the confirmed cases of AI is unknown, but is believed to be linked to migratory birds, as has been the case recently elsewhere in both Canada and the United States.

For ongoing updates from the CFIA, please visit: <https://inspection.canada.ca/animal-health/terrestrial-animals/diseases/reportable/avian-influenza/detection-of-highly-pathogenic-avian-influenza-h5n/eng/1640207916497/1640207916934>

Taking Care of Each Other

The APIEMT alongside industry is currently working to develop a peer support network. The intent of the network is to create connection and support our fellow farmers. The network hopes to support those who may be going through a challenging time. For some this might include feeling the weight and anxiety of the risk of catching AI on-farm, or those who have been directly impacted.



Mental and human health continues to be a priority as the industry navigates Avian Influenza.

On December 1, 2020 Alberta Chicken Producers launched the "Good Neighbours Program". The program is structured around three pillars.

- Corporate Social Responsibility Pillars:
 - Creating Connection
 - Building Strong, Healthy Communities
 - Social Responsibility

Since its launch, Alberta Chicken Producers' have donated \$60,000 to Food Banks Alberta. For more information regarding the program and included social responsibility activities, visit: <https://chicken.ab.ca/good-neighbours/>

From our families to yours, care is at the heart of what we do.

EXTRAS:

Chicken Myths Debunked:

- Added hormones and steroids are never used in chicken production. In fact, they are illegal and have been for over 50 years.
- There are no antibiotics in the chicken you buy. Farmers follow strict withdrawal periods to ensure no meat bought at the store contains antibiotics.

Chicken Fun Facts:

- All Alberta chicken farms are family-farms.
- All chickens raised for meat in Canada (broilers) are free-run
- All farms follow a mandatory Animal Care and Food Safety Programs, which are third-party audited.

100% of Alberta chicken farms are family-farms 🥰



- If you buy fresh, never frozen chicken at the grocery store it's guaranteed 100% Canadian and likely from a local Alberta farm.
- From 1976 to 2016, the carbon footprint of Canadian chicken was reduced by 37% due to major productivity gains and improvements in the feed to gain ratio (the efficiency of converting feed to muscle).
 - 62% of the energy used to raise chickens comes from renewable resources.

For more information about chicken and how chickens are raised in Alberta, please visit: www.chicken.ab.ca



Cory Olson

**Program Coordinator, Alberta Community Bat Program,
Wildlife Conservation Society Canada**

All summer long, bats have been flying around your home, over fields, wetlands and rivers feeding on insects. They are rarely noticed, and seldom appreciated, yet they provide tremendous value to our economy and the health of the environment. Contrary to myth, there is no reason to fear bats. But one concern is real—we are at risk of losing our bats, and with them, the services they provide.

Although we have no way of knowing for sure, there are likely millions of bats in Alberta. We find bats everywhere we look. They are common in every city, rural community, and natural region of Alberta. Southern Alberta is home to eight of the nine bat species in the province. They are particularly common along rivers, which is where most towns and cities are located.

When people encounter bats it's often because they find them living in one of their buildings. These bats are just resting (also called roosting) until the sun goes down. Bats don't create nests, but they need safe, warm roosts to raise their offspring. Most of the time, bats seen roosting in buildings or bat houses are Little Brown Bats, or their larger counterpart, Big Brown Bats.

Large groups of bats seen during the summer are usually mother bats that gather to raise their pups. Most bats only give birth to one pup per year, but groups could easily number in the hundreds, and sometimes thousands of individuals. Interestingly, these bats often don't just use one roost during the summer, but, instead, move around a network of available roost sites (carrying their pup). The bats roosting on your property could be many of same bats that roost on your neighbour's property.

It can be alarming to find bats around the places you live, but those bats are providing an important service and economic benefit. Bats go more than half the year without food, but during much of the summer and fall they need to eat over their body weight in insects every night to meet their energy demands, and to fatten up in preparation for winter. A single large colony of Little Brown Bats could potentially eat over a ton of insects during the year. This amounts to millions of insects annually.

You are likely already aware that bats eat mosquitoes. If you



Photo by Melissa Penney

have been out enjoying a campfire at night, you may have noticed bats flying above your head feeding on the swarms of mosquitoes that you attract. However, most bats are opportunistic—they eat what is plentiful and easy to catch. Bats eat a diverse range of bugs, but in Canada, they only eat bugs. Most of what bats eat are insects that fly at night, but spiders are sometimes also eaten.

One of the favourite food of bats are moths. The larvae of moths—caterpillars—are major defoliators of trees and crops. Bertha Armyworm, Cutworm, Diamondback Moth, and many others, are among the favourite prey of bats. Beetles and flies are also common prey, which, likewise, include many types of agricultural and forestry pests. Like they do with people enjoying a campfire, bats may also fly above livestock, feeding on swarms of mosquitoes and flies that bother livestock and result in lost yields.

We have only begun to understand the value of bats to our economy and environment. One study estimated that the loss of bats could cost the US agricultural sector \$23 billion dollars in lost productivity each year. Bats may similarly benefit the forestry sector. We don't know the value of bats to Canada's economy, but it's easy to imagine their services being worth hundreds of millions of dollars annually.

Considering the economic and ecological benefits provided

by bats, it is alarming they have become among the most imperiled wildlife in Canada. Two of Alberta's nine bat species are already Endangered because of the continuing spread of white-nose syndrome, caused by an invasive fungus, *Pseudogymnoascus destructans* (Pd), that is spreading across North America.

Our program has been monitoring the spread of Pd in western Canada over the last couple of years. We have confirmed its presence in the Milk River Basin in southern Saskatchewan, and it is quickly approaching—or has already crossed—Alberta's southern and eastern border. Population declines, potentially exceeding 80% for some species, are expected once the fungus becomes established in the province. Among the most impacted species is the Little Brown Bat, which is one of southern Alberta's most common bats.

The conservation status of three additional species—the Silver-haired Bat, Eastern Red Bat, and Hoary Bat—is currently being assessed by The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) because of concerns about mortality caused by wind turbines. A similar assessment is underway in Alberta. By one estimate, turbines in Alberta have killed an average of almost eleven bats per turbine each year—and there are already nearly a thousand turbines in the province. Mortality rates that are already believed to be unsustainable will worsen as tens of thousands of new turbines are installed across the continent.

Fortunately, it's not too late to help our bats. We cannot stop white-nose syndrome, but we can ensure bats have safe, healthy, effective habitats to sustain and rebuild their populations. Healthy wetlands and riparian areas are critical for providing resources that bats need to thrive. Organizations such as Cows and Fish, MULTISAR, and others, have recommendations for sustainable grazing and other suggested practices for maintaining wetlands and riparian areas.

The wind energy sector has a key role in ensuring the future of bats. There are technologies, siting considerations, and operational adjustments that can be used to reduce bat fatalities caused by wind turbines. But these actions will only be successful if they are actually implemented and continuously improved as the industry grows.

Our program provides free downloadable guides on many topics relating to bat-friendly management, including managing bats in buildings, building bat houses, and creating healthy, safe habitats for bats. These can be found at www.albertabats.ca.



Hilltoppers Gymkhana Club

3 Generations

Submitted by:
Richard Ment of Hilltoppers Gymkhana Club

The slogan of the HGC which was incorporated on Oct 31, 1967 is

“The Outside of a Horse is Good for the Inside of a Person”

The club was started by a group of families in 1967 who wanted something to do with their horses. The three fundamentals of the club were:

1. Teach, Train, Supervise and prepare, to the best of our ability, the youth of our community and surrounding areas, for better horsemanship, sportsmanship and competitive spirit.

2. To provide supervision and instruction facilities and organization functions for our young people.

3. To provide supervision and instruction to the best of our ability at all competitions and activities sponsored by the club.

Money for the club is raised from donations, memberships and grants. The memberships are affordable and always have been as to keep and get new members involved.

Everyone brings their own Horses. Animals are always well kept and treated with respect and dignity. These gentle giants are a great aid in teaching our youth responsibility, patience, fortitude and appreciation.

The club has evolved over the years. My parents and other member parents being the first generations. Later my sister and I and other children were introduced into the club at a young age. It used to be a full day of riding on every Sunday from mothers day to 2nd weekend of September. We would start at 10 am. In the morning we would have the (fast) gymkhana events. Poles, Barrels, Flags, Keyhole and the stake race. Afternoon brought the (slow) equestrian events more focused on improving riding skills and showmanship skills.

Today my kids are part of the club and it has evolved into Sunday at 1 p.m every other Sunday until late September. We also have roping facilities available which members can use some evenings when the steer are available. The evolution of peoples schedules and sports commitments in other areas has made lives busy.

Therefore we adjusted. We run the main fast events now and are usually done 4 o'clock.

The club has evolved the principles and values are unchanged. We watch each others children. We volunteer. We open doors for each other. Greetings are standard and politeness expected. We encourage competition but the value of a win is shared by all with laughter. The lesson of a loss is greeted with encouragement and some razzing.



Cattle Producer Mike Hittinger
with his combine

MY OFCAF EXPERIENCE:

Cattle producer Mike Hittinger talks OFCAF with RDAR

Mike Hittinger is a cattle producer and Board Chair for Gateway Research Organization (GRO). He and his wife Melissa have run a cow/calf operation east of Clyde, Alberta for 18 years.

Mike applied to the On-Farm Climate Action Fund (OFCAF) to help enhance his farm's grazing system. He plans to make their pastures more resilient to climate change — better able to handle excess moisture and weather droughts. We had the opportunity to connect with Mike to talk about his experience with OFCAF and how this program may be able to help other producers transition into new farming ideas.

Excerpt:

OFCAF: Tell us about your farming operation?

Hittinger: My wife Melissa and I run a cow/calf operation east of Clyde and have been doing so for about 18 years. Our farm relies heavily on a rented land base, and we are fortunate to have most of our pasture within 5-7 miles of home. We calve in May/June and usually back-ground the calves through the winter. We also breed some heifers for sale as well. I have sat on the Board of Directors for Gateway Research Organization since 2021 and became Chairman of the Board this past spring.

OFCAF: OFCAF is a new program. How do you think it will help farmers and producers in your community?

Hittinger: OFCAF's high-cost share proportion (at 85:15) will certainly help convince our local producers to try some projects that they may not normally consider, and this funding may help to ease their transition into trying some new

ideas.

Quite often the cost of trying a new technique is a barrier to adoption, particularly when the cost of adoption is high, and/or the success of the technique isn't well known or accepted locally. Cost share programs such as this help by reducing the cost of the technique to aid in increasing adoption. I also see some potential opportunities here to help cattle producers and grain farmers work together to make cover cropping a more feasible practice in the area.

OFCAF: Has changing climates affected your farming practice in any way?

Hittinger: I am getting concerned with the bigger swings we seem to be seeing in annual rainfall over the past 7-10 years which have caused significant swings in forage production. We have gone from record wet to record dry in the span of a year, which does cause one to be concerned.

OFCAF: What adjustments will your application to OFCAF help you make on your farm?

Hittinger: OFCAF will help us make changes to our grazing system that should make our pastures more resilient and better able to handle excess moisture and weather droughts. Additionally, fitting cover crops into our silage acres will improve the ability of our soil to handle moisture fluctuations as well through increased organic matter and soil health.

OFCAF: How do you think this change in practice OFCAF will benefit your farm?

Hittinger: We have currently been approved by OFCAF for a Rotational Grazing project. OFCAF funding is helping us to be able to spread manure on some of our

land that is farther from our yard. This project will provide us with the benefit of spreading manure on land that has not yet been spread on and will reduce our need for urea on that land for the next year or two. Additionally, the land this project will be carried out on has some light soils, so will also receive the added benefit of increased organic matter to improve soil tilt and water holding capacity.

OFCAF: What other OFCAF-projects would you like to try on your farm?

In the future, we are planning some cross-fencing projects that will include improved watering systems. These projects will allow us to reduce the graze period on 650 acres of pasture to 3-4 days, improving grass health, productivity, carbon sequestration and carrying capacity. We will also be looking into seeding some cover crops in 2023 to help improve soil health.

OFCAF: How has your OFCAF application and approval experience been so far?

Hittinger: So far, the process has been smooth. OFCAF staff answered my questions promptly and were very helpful in making my application a success. The application process was straight forward and simple enough to complete. Even when I had some small changes to make after the application was submitted, the change was easily made with the help of the program staff.

As with any new program there will understandably be a few kinks to work out, but it is refreshing to know that Program Manager Fiona Briody's understanding of the industry and her common-sense approach will help keep the program headed in the right direction.



Past, Present, Future



Matthew Wells, ASB/EFP Technician

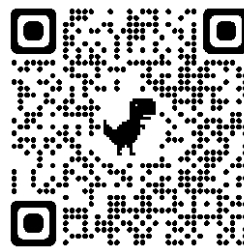
It's that time of year again. The crops are off, the weather has turned cold, equipment is either being fixed or parked until next year, the winter season approaches, and we all begin to hide away in our warm, cozy homes for the proceeding months. Unless you like winter and enjoy being outside, snowshoeing out in Waterton, skiing at Castle Mountain, or playing hockey. I don't mind the cold as long as there is snow on the ground. Sure, the last couple winters haven't been as cold, and you'd think that would be great. Cool, mild weather. What's there to complain about? The lack of snow. Snow provides much needed moisture in the Spring, cover for fall seeded crops in the wintering months, and cover for bare soils from erosive winds. The last two winters have not been great, especially during the months of January and February. Here's to hoping that mother nature will give us a hand the coming winter months. In case she doesn't, make sure you are prepared and take the necessary steps to alleviate soil erosion. After having witnessed it for two years, it's great to see farmers adapting to the dry winters with fall seeded crops and utilizing other methods to combat soil erosion.

Weather is unpredictable, with this year being no exception. For majority of Spring, we saw little to no rain in the area resulting in a long dry spell with crops (specifically canola) coming up patchy. If memory serves right, many producers held off on seeding canola in the hopes that it would rain. Some much-needed rain and showers occurred over the majority of the weekends from middle of June till middle of July and then came the heat as most days were above 30 degrees Celsius from August to end of September. Not only did canola struggle early on, but we also saw the heat shorten what looked like 60 bushel stands to 15-30 bushel stands. A tough year for canola and canola producers alike. Thankfully, many of the other crops grown in the area did very well.

With the dry spell we had during Spring, I noticed a particular Noxious weed that bolted early and seemed to fair well right up to the Fall season. It's none other than Leafy Spurge (*Euphorbia virgata*). It was odd to see the plant fully grown and flowered during the month of May, a month early compared to previous years. It's not uncommon to see a noxious or prohibited noxious

weeds do well. Last year, it was Scentless Chamomile (*Tripleurospermum inodorum*). Leafy Spurge, listed as Noxious here in the County, is one that we do manage for. Of course, it is difficult being that it reproduces via both rhizomes and seeds that explode and launched up to 15m away. To control and potentially remove, an integrated approach is needed. This summer, Lethbridge County collaborated with Alberta Invasive Species Council, the City of Lethbridge, County of Newell, Blood Tribe Lands Management, and Lethbridge Research and Development Centre to develop an informational video regarding Leafy Spurge and how we all utilize an integrated pest management approach when controlling Leafy Spurge. The video should be coming out shortly if it hasn't already. Be sure to watch our social media feed as you won't want to miss it!

Speaking of videos, if you haven't seen it our first of many Rural Living & Ag Extension videos has come out! Grant Collings discusses pruning, disease, and insect damage here in Lethbridge County. Scan the QR code to watch!



Our next guest speakers are Rod (Neveridle Farm Ltd.) and Maxwell (Manager of Hemp Hub) who discuss value added crop production of hemp. Here is a short excerpt from the interview.

Rod: *We have a hemp project that we are attempting to value add to one of the four crops we grow. So, our plan is to decorticate the stalks of the hemp plant and we're going to break it up into its three parts. We're going to pull the fiber off its outside, we're going to separate the heard, and then all the dust we're going to collect into a product like this. We hope to supply several other Alberta companies with the raw products they need to make example mats or board for flooring and many other things that the fiber, heard, and dust can be used for.*

Look for the video to come out on November 15, 2022.

Would you like to participate in an upcoming video? Please contact Matthew Wells at 403-634-0147 or mwells@lethcounty.ca. Look for us again the first week of March. Till next time!



Maxwell (Left) and Rod (Right) discuss hemp fiber being pressed into hemp wood.

Update from ASB Supervisor Gary Secrist

The 2022 season has been a busy one for the ASB Department here in Lethbridge County. Second cut for mowing went quick and will be completed the first week of November. Roadside spraying took place in Divisions 5, 6, and 7 with weather being favorable as rain occurred during the weekends, wind was relatively reasonable, and the heat didn't come until middle of August. Grasshoppers and bertha army worm surveys were completed with results showing that pest numbers decreased. A new playground was built in Monarch during Spring. It has been noted that each time an ASB crew member has gone out to the playground to check on equipment or mow the surrounding grass, there has been children enjoying the equipment which is amazing. Reseeding of roadside ditches took place during the month of October and now crews have either already begun or are about to conduct tree cutting along County rights-of-way. It has been a great year for the ASB crew, and we are looking forward to the 2023 season.

