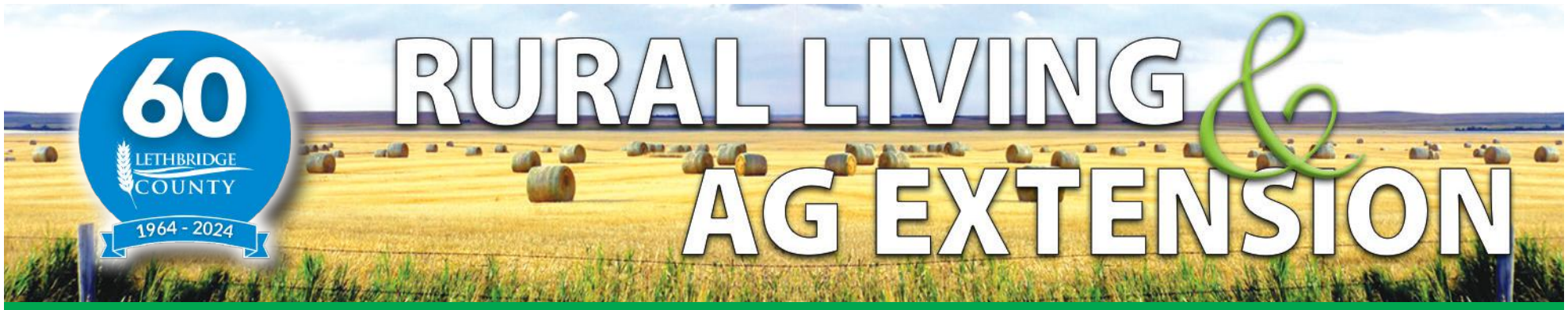


LETHBRIDGE COUNTY NEWSLETTER ★ SPRING 2024

FARM FAMILY SPOTLIGHT: Kasko Cattle

Submitted by: Kasko Cattle

Les Kasko's parents immigrated from Hungary in the 1920s and 1930s and met in Raymond in the 1940s. They were drawn by dreams of prosperity that could be found in the fields of southern Alberta hoeing sugar beets. They never found the "pot of gold" but had fulfilling lives, nonetheless. Growing up at Barhill and Sunnyside, Les saw the cattle buyers that stopped at their farm and thought that would be a good business to be in.

Les and Betty established their family on a farm near Iron Springs while Les worked for Canada Packers. Over time, Les started his own order-buying business and began exporting cattle to the U.S. They settled in the McNally district with their three children. Once Ryan and Greg graduated from university and joined Les' business, they decided to buy a feedlot. Over the past 27 years, Kasko Cattle has grown to include an irrigated crop farm and two feedlots in Lethbridge County as well as feedlots and farm land in the MD of Taber and County of Warner. They have a team of 70 dedicated employees.

Central to the success of Kasko Cattle has been Les' emphasis on fostering strong relationships with customers, partners, suppliers and employees. The Kasko family business has grown to include all of the Kasko siblings and their spouses and now the next generation has begun to play a larger roll on the farm.

Over the past 7 years, Kasko Cattle has upgraded all of its feedlot pens with roller compacted concrete. This raises the bar on cattle comfort because it gives the cattle a firm base to stand on and allows pen cleaning to happen more regularly. Manure is better quality because it doesn't mix with the traditional clay pen floor. And employees find it much easier to do their jobs.

Operating a feedlot requires continual investment in facilities and equipment to keep up in the competitive nature of the industry. This helps drive a lot of success for supporting businesses in the County. There has been much investment by cattle feeders across the province. There has been significant expansion. The challenges the industry faces include a rapidly declining cow herd that supplies the cattle for the feedlots. Additionally, there is limited processing capacity for the finished cattle in Alberta. The next few years will be interesting to see how the supply and demand will balance.

The Kasko family has been looking very closely at opportunities to upgrade their cattle manure and enhance their environmental footprint through a bio-digester. There is much interest in building digesters in Lethbridge County to collect renewable natural gas from the manure that could be sold into the network of natural gas pipelines. Manure would be hauled from feedlot pens on a more frequent basis to the bio-digester which should help reduce odors and allow for greater cattle comfort. The leftover digestate from the bio-digester process would be a more consistent fertilizer product that can support crop production. The use of this green energy is a win-win for the environment and the cattle industry.

Ryan is very optimistic about the future of agriculture in southern Alberta and Lethbridge County, in particular. We have people that have a passion for innovation and the capacity to take risks. Lethbridge County will continue to see a strong cattle-feeding sector along with more investment in potato farms; hybrid seed production; alternative energy projects and food processing. The upgrading of the storage capacity of the Chin Coulee reservoir will support more irrigation which will likely spur opportunities that we can't imagine.

WHAT'S *in this* ISSUE?

Women in Farming

Submitted by: Billi J. Miller

Pillar, backbone, rock, anchor: these words, plus more, just like them, could all be used to describe the wives, the moms, the women of Canadian family farms.

Singing the praises of Canada's farm women, just as I have in my books, will never grow old for me. So, when I was asked to provide an article for this newsletter for Lethbridge County, it was an easy "yes."

I'm an author, photographer and speaker from east-central Alberta, and I've written four books that celebrate and honour family farms and the people on them. However, more than my professional title, I am a mom to two farm girls and the proud wife of a mixed cattle and grain farmer.

I didn't come from this life. Until 2009, I lived in the city where I worked for the Provincial Government. But, when I met a 4th-generation farmer while on a fishing trip, and we became serious, I knew he wouldn't be the one moving to the city. So, in the Spring of 2010, I moved to the farm.

As I transitioned to farm life, I fell in love. I fell in love with so much of it: the deep roots and long histories of the families living there, the generational friendships that seemed to keep going, and I was in awe of the matriarchs.

When I left my government job, I harnessed my entrepreneurial spirit and began a freelance writing and photography career. It was fueled by the realization that after marrying Dean, I noticed very few photographs of their rich, 100-year farming heritage. I felt called to do something about it. I began writing for local newspapers near our farm, where I would tell stories of the local families. I offered a fresh perspective on this traditional life. I found such beauty in it.

As I followed farm families and took photos for them or wrote about their lives and histories, I kept seeing a common thread. The common thread to these traditions I found was the women. I saw the women as the pillars holding up their families, farms, and entire communities.

When a new person would enter the community, a shower would be held at the nearby community hall, and the women would organize the welcome and bring the food. Meals in the field over long harvest seasons, all carried out by the women. They were the nurturers, organizers, planners, and doers - not to mention the staggering workload of keeping a family home running. So much was carried by them.

I wanted to honour them for that. Over four years, I would write two books celebrating and honouring "farmwives" for their tremendous contributions to Canada's family farms. Roles have changed over the years, and the roles of women (and men) will constantly evolve and change. However, I wanted to honour and celebrate these women for all they did and continue to do to keep family farms thriving. It was a gift to me to sit at their kitchen tables and ask them candid questions about their lives. The two books in my Farmwives Book Project contain interviews, photographs and straight-from-the-farm-kitchen recipes. This project was a labour of love.

Since those two books, I've continued to write and freelance for newspapers and magazines, and I've also written two more books (https://www.billijmiller.com/shop). I write about farm life and the special people on it, and I hope they'll be a lasting legacy of this unique way of life.

I consider myself lucky to have landed on a fourth-generation Canadian family farm. I'm glad I'm here and grateful to the women who came before me. Until next time, thanks for reading.

- Billi J. Miller is a published author, photographer and speaker from east-central Alberta. She freelance writes from her home office, where she can be reached through her website at billijmiller.com. For more on her Farmwives books, visit billijmiller.com/farmwivesbookproject.

Readymade

Submitted by: Belinda Crowson

Photo credit: Glenbow Library and Archives

In the early 1900s, the Canadian Pacific Railway wanted to encourage settlers to purchase land from the CPR and then stay and farm. This would result not only in land sales, but the increased settlement would mean boosted rail traffic and enhance the CPR's long-term profits.

One idea developed was the readymade approach where the CPR developed a settlement with a few farms prepared for incoming farmers. This meant breaking the land, constructing fences, digging the irrigation ditches (where required), and building a house, barn and even a well for the purchaser. When the farmers arrived, the only thing they would have to do was plant and grow their crops.

The CPR limited those who were allowed to purchase readymade farms. Purchasers needed to be married men who had prior agricultural experience, the equipment necessary to work the farm and enough capital that even after making the first payment, they had enough money left to provide for the family's first year on the land.

The advantage for the farmers was a quick return on their investment and that they did not have to face the problem of preparing the land for farming, something many settlers were ill-equipped to do. Additionally, the CPR created a system of long-term, low-interest loans made available to those who purchased readymade farms. The plan was to not only make farmers more successful in the agricultural realm, but ensure they were on a sound financial footing.

The CPR eventually set up some 21 sites on the prairies with readymade farms. One site was located east of Coaldale and the district became known as, perhaps not surprisingly, Readymade.

Development on the farms in the Readymade district by Coaldale started in 1912.

The 9 May 1912 Lethbridge Daily Herald reported that seventeen readymades would be constructed "on the irrigated lands east of Lethbridge." These farms were placed close to the main road from Lethbridge to Chin and would be ready for occupancy in 1913. Each of the farms were 160 acres in size. It was noted that the buildings were of various sizes to suit the needs of those who would soon be occupying them. All of these farms were developed for irrigation and the CPR encouraged, and later ensured, that 50 acres of the land was seeded to alfalfa as mixed farming was also encouraged.

It was estimated that the improvements on one of these Readymade farms at the time of sale was worth roughly $3500. It was onto just such a farm that John and Frida Hamilton moved in 1913. They bought the first Readymade farm, purchasing the land while still in Ireland prior to moving to Canada.

"Within forty-eight hours of their arrival in Lethbridge they had collected their effects and were last night cosily ensconsed in their new Canadian home, which is fitted with up-to-the-minute farm buildings." (22 April1 913, Lethbridge Daily Herald) The Hamiltons intended to seed approximately 50 acres of their land that year.

The Hamiltons did very well on their Readymade farm, which "soon became noted for its stately trees, its fine garden and its masses of flowers." (26 January 1946, Lethbridge Herald) Hamilton also entered his produce and crops in numerous fairs and exhibitions and over the years won 64 ribbons and trophies, with five world championships for peas and beans among his awards.

John and Frida Hamilton weren't the only farmers to move out to a farm at Readymade in 1913. By April 1913, Peter Naismith, manager of the CPR department of natural resources, noted that nine of the seventeen farms had already been sold.

However, despite the strong sales the first year, the Readymade area by Coaldale and all the CPR's readymade projects faced some difficulties. Overall, the readymade projects were not as successful as the CPR hoped and, in 1914, the CPR canceled the project. Some people who had purchased lands in the readymade projects defaulted or fell behind on their payments. In some cases, the CPR couldn't sell the farms despite a great deal of promotion.

The first family in Readymade, the Hamiltons, continued farming until the early 1940s when ill health caused them to retire to Vancouver Island. The Hamiltons weren't the only ones to move from Readymade. Within a few decades, most of the original Readymade families were gone and by 1955, only one of the farms in Readymade was still being operated by descendants of an original family.

However, while many of the original families may have left, the Readymade name and district continues.

By 1917, enough families were in the Readymade area that Readymade School District #3542 developed. The first teacher was Mr. J. Jackson, who also served as janitor in the school. Readymade SD combined with Twelve Mile and East Readymade to form Readymade Consolidated School District No. 46. In 1935, the school was enlarged and an auditorium, science room and classroom added. This school district was disorganized in 1954 and the school closed in 1961. After the school was closed, the Readymade Community Association was formed with the purpose of maintaining community connections and used the old school as their site. When the Readymade Community Association built a new community hall a few years ago, they constructed the building to look like a readymade barn.

What's EFA?

Egg Farmers of Alberta (EFA) represents the province's more than 165 egg farming families and Hutterite colonies, who care for more than 2.9 million laying hens that produce over 82 million dozen eggs every year. EFA was established in 1968 to manage the Alberta egg industry and promote fresh, nutritious, locally produced eggs. EFA is lead by a Board of Directors that consists of 6 elected egg farmers, and a passionate team of 12 staff members. Visit **eggs.ab.ca** to learn more about EFA and the Alberta egg industry.

EFA manages the provincial quota system, since the egg industry is one of five commodity groups that operate nationally under the uniquely Canadian system of supply management, along with the chicken, hatching egg, turkey, and dairy industries. EFA is also responsible for managing the mandatory national on-farm food safety and animal care programs, as well as a provincial environmental program that is the first of its kind in Canada. You can find fresh, local eggs by looking for the Egg Quality Assurance™ (EQA®) logo on the carton – check out **eggquality.ca** to learn more about the EQA® program.

EFA's missions statement is *cultivating a sustainable egg industry together with farmers, consumers, and other stakeholders.* To this end, EFA launched its inaugural sustainability strategy in 2014, publishing an annual Sustainability Report from 2015-2020. A revamped sustainability strategy was launched in 2022 that consists of 8 pledges across EFA's four pillars – healthy birds, healthy eggs, healthy farms, and healthy communities – and is intended to guide the provincial egg industry over the coming years. Egg farmers are dedicated to providing their fellow Albertans with safe, high-quality, nutritious eggs from hens that are well cared for, while working to reduce their carbon footprint and minimize their overall environmental impact.

Alberta egg farmers work closely with the province's two major egg grading stations – Burnbrae Farms and Sparks Eggs – to ensure Albertans across the province always have a wide variety of eggs to choose from at their favourite local grocery store. Whether you prefer white or brown eggs, free-run or free-range, Omega-3 or organic eggs, you can feel good feeing fresh, local eggs to your family. All eggs sold at retail in Alberta and across Canada must first stop at a grading station certified by the Canadian Food Inspection Agency (CFIA), where they are washed, inspected, graded (weighed), and packaged. In Alberta, it typically takes about a week or less on average from the time an egg is laid on farm, to the time it hits the grocery store shelves. To help you decide what eggs are right for you and your family, you can learn more about the different types of eggs on the EFA website – **eggs.ab.ca/healthy-eggs/types-of-eggs.**

Have you ever wanted to be an egg farmer? Now is your chance! EFA launched its New Entrant Program (NEP) in 2012, to assist individuals and families who want to own and operate a commercial egg farm in Alberta. EFA issues a portion of newly allocated egg quota to successful applicants, thereby alleviating some of the new producer's start-up costs. The NEP is open as of January 2024. EFA's NEP application window will open on May 1st, 2024, and the deadline for submitting a completed application to EFA is June 25, 2024. To learn more about the New Entrant Program, or to register for the upcoming NEP webinar, check out the EFA website – **eggs.ab.ca/healthy-farms/new-entrant-program.**

In addition to the EFA website, you can connect with EFA on any of our social media channels including Facebook, Instagram, X (formerly Twitter), YouTube, Pinterest, or TikTok. If you are looking for new ways to enjoy eggs, look no further than the recipe section of EFA's website for mouthwatering inspiration – **eggs.ab.ca/cooking!**

Eggs from Alberta egg farmers are fresh and local, delicious and nutritious, versatile and affordable. Get Cracking!

How Aeration Improves Water Quality

Information from: Agriculture and Agri-food Canada (https://agriculture.canada.ca/en/agricultural-production/water/ponds-and-dugouts/how-aeration-improves-water-quality)

Aeration helps prevent taste and odour problems by ensuring that oxygen concentrations remain high enough throughout the entire water column to prevent conditions of little or no oxygen (anaerobic). Aeration also helps prevent the release of phosphorus from sediments. This limits algae growth and reduces the amount of plant material present to ultimately die and decompose.

Aeration prevents the release of iron from the sediments and the problems associated with high iron concentrations such as damage to water treatment systems, water distribution systems and drip irrigation systems.

Artificial aeration augments the natural process of oxygen replacement. This is accomplished by injecting air into the deepest part of the dugout producing a non-turbulent mixing action; lifting the oxygen-depleted water from the bottom to the top to circulate with the oxygenated water.

In the summer, warm temperatures produce very high levels of biological activity, resulting in increased oxygen demands. The rate of oxygen diffusion cannot keep up with the rate of oxygen consumption. This results in the quick depletion of oxygen levels in the water. This occurs most frequently when warm temperatures produce very high levels of biological activity which can very rapidly consume the oxygen.

This is the most common cause of summer fish kills in dugouts and lakes.

In the winter, once ice forms on a dugout it seals the surface and prevents very little new oxygen from diffusing into the water. Under these sealed conditions, algae decay quickly consuming any available oxygen.

Once oxygen levels become low, anaerobic organisms take over the decomposition process resulting in the release of unpleasant smelling gases such as methane and hydrogen sulfide.

The absence of oxygen in the water also allows plant nutrients (nitrogen, phosphorus) and metals (iron, manganese) trapped in the dugout sediment to dissolve into the water. A layer of poor-quality water that is high in nutrients and metals begins to form at the bottom of dugout. As long as anaerobic conditions exist, the amount of poor-quality water grows quickly and moves upward.

In the summer, anaerobic conditions may go undetected if water intake is near the surface of the water. However, water conditions near the bottom of the dugout may be anaerobic. In the winter, anaerobic conditions are present when the water turns black (may be caused by dissolved iron, manganese and other dissolved or decomposed material) and has a rotten egg smell (caused by hydrogen sulfide gas).

Typical Winter Dugout Water Quality

Parameter (mg/L)	Aerated	Non-Aerated
Dissolved Oxygen	14.3	0.4
Iron	0.04	1.5
Phosphorus	0.05	0.15

Continuous year-round aeration produces the best water quality. In fact, data indicates that water quality continues to improve for up to five years after a continually operating aeration system is installed in a dugout.

SEED CLEANING - Did You Know?

Submitted by: Gary Secrist, Supervisor, Agriculture Services Lethbridge County

Lethbridge County Agriculture Services department is responsible for Seed Cleaning Plant Licensing within our borders. These Licenses are issued to Seed-Cleaning Facilities under the authority of the Weed Control Act to protect users from the spread of weeds due to things like poor practice, design, and maintenance of seed cleaning facilities.

Facilities are rated in two categories:

1. The design, maintenance, and operations of the facility relating to the control of weed seeds. In this category plants are inspected and rated for but not limited to:
   - Spouting condition
   - Boots cleaned between lots
   - Receiving pit in good condition
   - Screens in good repair
   - Main area clean of spilled grain, weed seeds
   - Loading and driveway conditions
2. Visual verification on the quality of seed produced. Inspectors are looking for weed seeds and have the option to identify which weed seeds are present. This category requires inspectors to collect and inspect a minimum of 20 samples of cleaned products.

Categories 1 and 2 are rated equally and facilities must obtain a score of 80% to receive a license. You can rest assured that if you are cleaning seed in Lethbridge County it meets a high standard. Be sure to look for the license and grade next time you are at one of the seed plants.

For more information on the activities of the Agriculture Services department, check out our Level of Service document available online at lethcounty.ca/p/agricultural-services, or scan the QR code.

Agriculture Services Level of Service

FROM BEAKS TO BREAKOUTS: *Avian Flu Explained*

Submitted by: Kelsey Gourlie and Everett Hanna

Highly pathogenic avian influenza (HPAI), commonly known as bird flu or avian flu, remains a global concern, with cases detected in various regions, including North America. In Alberta, the disease has been an ongoing issue for several consecutive years.

Avian influenza is a viral disease primarily spread through direct contact with infected individuals or contaminated items like food and water. The current strain causing worry in the Western Hemisphere, H5N1, likely originated from strains introduced to North America in 2014 through interactions between Asian and North American migratory waterfowl in extreme northern breeding grounds. Since its introduction, the virus has undergone a process called "reassortment," leading to the emergence of H5N1 in recent years.

"Highly pathogenic" refers to the virus's ability to cause severe illness or death in chickens. However, there have been no reports of sustained human transmission. While commercial poultry are frequently affected, wild waterfowl, particularly ducks, are believed to be the primary reservoir of the disease in non-commercial settings. There is no known risk of contracting avian influenza from properly cooked poultry or poultry products. Nonetheless, individuals who handle live birds regularly should take precautions.

The most recent outbreak of avian influenza in Alberta was first detected on April 6, 2022, in a commercial poultry operation in Ponoka County. Since then, the strain has spread to non-commercial wild bird populations. In wild populations, spikes in confirmed cases typically occur during migration, especially in the fall and early winter months when birds congregate in large numbers in colder conditions with reduced food resources. During breeding seasons, wild birds disperse to breeding grounds, reducing transmission and susceptibility. However, when they recongregate for fall migration, the cycle continues. The first case of H5N1 in wild ducks in Alberta was detected in the fall of 2022.

While the virus can cause unpleasant symptoms in birds, such as loss of coordination, behavioural changes, and mortality, it's essential to recognize that wild populations have likely coexisted with naturally occurring variations of the virus for a very long time. Given the absence of a cure or vaccination, response efforts mainly focus on surveillance and controlling the spread in commercial settings. Surveillance efforts involve public reporting, targeted monitoring, and innovative methods like using drones and artificial intelligence (AI) to detect deceased birds over larger areas. Locally, faculty and students from the School of Environmental Sciences at Lethbridge College have collaborated with municipal, provincial, and federal agencies to monitor local mortalities and collect samples for necropsy (non-human autopsy) at the Canadian Wildlife Health Cooperative Lab at the University of Calgary. This targeted field surveillance is a crucial initial step in understanding the disease's ecology.

It's understandable for the public to be concerned when encountering dying or dead wild birds. However, it's recommended to avoid handling them without proper training and precaution. Pets can also transmit the virus, so it's important to keep them away from wild birds whenever possible. If handling wild birds is unavoidable, appropriate safety measures such as disposable gloves and masks should be used, with any points of contact disinfected afterward. Rather than intervening physically, the public can report unusual bird behaviour and suspected HPAI-related mortalities to the Government of Alberta through their toll-free line at 310-0000. Commercial poultry producers are encouraged to contact local Canadian Food Inspection Agency (CFIA) offices with any questions or concerns.

Apply Now for NO SPRAY AGREEMENTS

Lethbridge County's Agriculture Services roadside spraying program for weed control will commence any time after May 1, 2024.

Weed control is done during the growing season on County roads, as well as numbered highways. Pre-emergent herbicide is applied on some low use roads. Spray trucks are equipped with low-drift nozzles to greatly reduce off-target application, and applicators constantly monitor wind speed and direction.

As per the Agriculture Services Level of Service Policy – Appendix A "NO SPRAY ZONE" signs are available for landowners.

If you do not want roadside spraying done next to your property, you can enter into an agreement with the County in which you will put up a "No Spray Zone" sign (supplied by Lethbridge County). You will also be responsible for weed control in that area.

Signs must be picked up by May 1, 2024 from the Lethbridge administration office (#100, 905 4 Avenue S). Office hours are Monday to Friday from 8:30 a.m. to 4:30 p.m.

"No Spray Zone" agreements must be renewed yearly.

To fill out the agreement, visit https://www.lethcounty.ca/p/no-spray-agreements or scan the QR code.

For more information, please contact the Agriculture Services Department at 403-732-5333.

Strychnine Alternatives for Richardson's Ground Squirrel Control

Submitted by:
James Tansey PhD. Saskatchewan Ministry of Agriculture

Richardson's ground squirrel (RGS) is a burrowing rodent native to and widespread on the Great Plains of North America. This species is an essential component of grassland systems, an important food source for many predators, and consumer of large insects like grasshoppers. However, when they become numerous, they can be damaging to crops, pastures, and rangeland, and their burrows can injure livestock and damage equipment. In locales where they are very numerous, control can be necessary. Although shooting and drowning are used to limit populations, the most efficient means is poisoning. RGS and other rodents lack a vomit response, so poison baits are particularly effective.

A mix of 2% liquid strychnine concentrate with an attractive grain bait is an effective rodenticide for control of burrowing rodents, including RGS. However, the Pest Management Regulatory Agency (PMRA) of Health Canada (the body that regulates pest control products for use in Canada) issued a final decision to deregister strychnine for burrowing rodent control, based in part on the potential to impact non-target species. Given the great damage this pest can cause, its status as a regulated pest in Saskatchewan and Alberta, and loss of an effective control product, solutions for RGS control were needed.

Several products are currently registered for the control of Richardson's ground squirrel. They include the anticoagulant baits chlorophacinone (Rozol RTU), and diphacinone (Ramik Green), and the zinc phosphide-containing baits, Burrow Oat Bait and ZP Rodent Oat Bait AG. Specialists from the Saskatchewan Ministry of Agriculture and Alberta Agriculture and Forestry conducted a comparison in Southwest Saskatchewan and Southeast Alberta in 2022 and 2023. We examined the efficacies of these products and assessed non-target mortality associated with baits. Alternatives to strychnine for this comparison were chosen based largely on ease of use. None of the products tested require specialized licensure or training in Canada, are commercially available, and can be used with bait stations.

Significant reductions in RGS populations were seen for all the products tested. However, the zinc phosphide products performed numerically better than anticoagulants in Saskatchewan in 2022 and 2023 and were statistically similar to strychnine in both provinces in both years. Some inconsistencies were found with anticoagulant baits: Ramik Green resulted in significant reductions in RGS populations in Saskatchewan but not Alberta and Rozol RTU performed better at Alberta sites than in Saskatchewan. However, all the tested products reduced RGS populations.

Product	$ per acre (2023 prices)
2% Liquid Strychnine Concentrate	13.28
Burrow oat bit	8.46
ZP Rodent oat bait AG	6.74
Rozol RTU Field Rodent Bait	21.86
Ramik Green	12.34

An economic analysis of the costs of RGS control was conducted and is presented as per acre values based on 2023 commercial prices. The zinc phosphide treatments were the most cost-effective, followed by strychnine and then the anticoagulants. When multiple applications were considered for the anticoagulants (two for Rozol RTU; as many as three for Ramik Green), the cost of control could be high.

Like many pests, an Integrated Pest Management (IPM) approach is recommended for control. That is, base control decisions on potential losses balanced against the cost of control. The economic threshold (ET) for a pest is the population density where action should be taken to avoid economic damage. For RGS, one occupied mound every four metres or 20 per cent crop damage over 100 metres has been proposed. With more expensive products, tolerance for pest numbers should increase.

An integrated approach should also include tolerance of predators like raptorial birds, badgers, coyotes, foxes, and weasels. Ferruginous hawk feeds extensively on RGS. Badgers can significantly reduce RGS populations. Although badger burrows are large, some tolerance of these should be granted given the benefits. In keeping with an integrated approach, the Saskatchewan Association of Rural Municipalities (SARM) Gopher Control Program in Saskatchewan subsidizes the purchase of baits, raptor platforms for large birds, and boxes for smaller predaceous birds.

Application of baits is recommended as soon as RGS becomes active in the spring, preferably before green up. Efficacy of anticoagulants can be greatly reduced if baiting is late and RGS has green plant material to feed on when baiting occurs. The mode of action of Rozol and Ramik active ingredients is inhibition of recycling of vitamin K1. This reduces blood clotting. Vitamin K1 is the antidote for these compounds and alfalfa and grasses are particularly high in it. Neither zinc phosphide nor strychnine have effective antidotes, but effects of these baits can also be reduced if there are alternative food sources when application occurs.

Non-target effects can occur with baits. Strychnine kills quickly: onset of symptoms occurs in 15 minutes and poisoned animals often die in less than an hour. Rapid death means that almost all the strychnine consumed is concentrated in the gut. This may present a hazard to scavengers, but several predators and scavengers will eviscerate poisoned RGS to consume non-poisoned tissues. The bitterness of strychnine is thought to contribute to this effect. Anticoagulants can take several days to kill. This can allow movement of the toxin throughout the animal and represents a greater risk to predators and scavengers. Poisoning with anticoagulants also weakens and makes rodents more susceptible to predation. Zinc phosphide kills quickly and breaks down rapidly in the gut to release phosphine gas that escapes the poisoned animal reducing the potential for secondary poisoning.

Zinc phosphide breakdown requires weakly acidic conditions like a rodent's gut so is relatively stable, unlike aluminum phosphide that will break down in the presence of atmospheric water. Neither the Borrow Oat Bait nor ZP Rodent Oat Bait AG labels indicate the need for special considerations for wet conditions, but these products should still be stored in dry conditions. Zinc phosphide also degrades completely and slowly in moist soil to form phosphine and non-toxic zinc phosphates. This means that significant toxic residues are not left in soils or water.

Overall, all the products tested provided control of RGS on the study sites. However, given lower costs, reduced potential environmental contamination, and reduced non-target risks, zinc phosphide products are recommended. Keep in mind that all these products are toxic and should be used carefully and according to label directions. These are intended to be inserted into a rodent burrow or presented in bait stations. Broadcasting any of these products puts non-target animals at risk and is not permitted.

Funding Opportunities for Alberta Farmers

Sustainable Canadian Agricultural Partnership

Eligible Applicants

- Individual or corporation registered in Alberta that is responsible for day-to-day management and input costs of a crop operation and produce at least $25,000 worth of farm commodities annually.
- Approved Indigenous applicants (First Nation, Métis Nation, Inuit)
- Has current Environmental Farm Plan (EFP) certificate or letter or will receive one before the end of the project term. The name on the EFP does not need to match the name on the grant application but must be for the same farm. (Pertains to Efficient Grain Handling, Farm Technology, and Resilient Agricultural Landscape Program)

Efficient Grain Handling Program – Currently accepting applications
This is an energy efficiency program intended to assist producers with reducing the overall energy use on their operations

- ❖ Environmental Farm Plan (EFP) Required

- Eligible expenses will be cost shared at 50% grant and 50% applicant for approved projects and will be funded to:
  - ❖ minimum grant of $500/applicant
  - ❖ maximum grant of $100,000/applicant

Email questions to S-CAP.EGHP@gov.ab.ca or call 310-FARM (3276)

Farm Technology Program – Currently closed. Will Resume in April
This program (2023 to 2024) focuses on sensors and security devices to support innovative technology that minimizes agricultural waste, optimizes farm efficiency, and provides tools that secure business assets.

- ❖ EFP Required

- Supported activities fall under two streams:
  - ❖ **Farm technology** – Digital sensors that contribute to greater precision, more accurate matching of inputs with requirements.
    - ▪ Eligibility varies by farm type. To be eligible, technology should be innovative and not commonly adopted for the applicant's farm type or sector.
  - ❖ **Farm security** – Farm security devices to protect business assets and deal with trespassing, theft, vandalism, and biosecurity threats.
  - ❖ Eligible expenses will be cost shared at 50% grant and 50% applicant for approved projects and will be funded, as follows:
    - ▪ minimum grant of $500/applicant
    - ▪ maximum grant of $48,000/applicant for Farm Technology Stream
    - ▪ maximum grant of $2,000/applicant for Farm Security Stream

Email questions to S-CAP.FTP@gov.ab.ca or call 310-FARM (3276)

Resilient Agricultural Landscape Program – Review ***Note***
A new program that supports producers to conserve and enhance the environmental resiliency of their agricultural landscapes.

- ❖ EFP Required

- Funding is offered on a per-acre payment basis for a term of three years. Per-acre fee calculated as:
  - ❖ **Implementation Costs** + **Opportunity Cost** (if applicable) + **Impact Adjustment**
- Approved projects will be funded to:
  - ❖ minimum grant of $2,000
  - ❖ maximum grant of $150,000 for Primary Producers
  - ❖ maximum grant of $300,000 for Indigenous (First Nations, Inuit, Metis) and groups such as Grazing Reserve Associations and/or Community Pastures
- Intake Cycle:
  - Beneficial Management Practices
    - ❖ Year 1: April 3, 2023 – November 30, 2023
    - ❖ Year 2: February 1, 2024 – November 20, 2024
    - ❖ Year 3: February 1, 2025 – November 20, 2025
  - Wetland
    - ❖ Year 1: April 3, 2023 – January 31, 2024
    - ❖ Year 2: February 1, 2024 – January 31, 2025
    - ❖ Year 3: February 1, 2025 – January 31, 2026

***Note*: the Wetland funding category has a different schedule than that of the other beneficial management practices (BMPs).**

Email questions to RALP@gov.ab.ca or call 310-FARM (3276)

Water Program – currently accepting applications
This program helps producers adopt agricultural water management practices for continued growth and long-term success of the agriculture industry.

- There is limited funding in the program. Applications, considered on a case-by-case basis, will be assessed against program eligibility criteria and are subject to program funding constraints.
  - ❖ EFP is NOT required
- Supported activities fall under 2 streams:
  - **On-Farm water supply stream – Maximum of $35,000/applicant over program term**
    - ❖ **Standard incentives for New or Expanded Water Source Developments – eligible expenses cost shared at 25% grant and 75% applicant for a maximum of $15,000/applicant over program term.**
    - ❖ **Special Incentive Projects – eligible expenses cost shares vary and are project specific. Maximum grant of $20,000/applicant over program term**

Email questions to farmwatersupply@gov.ab.ca or call 310-FARM (3276)

- **On-Farm irrigation stream – Maximum of $30,000/applicant per fiscal year of program**
  - ❖ On-Farm irrigation system purchases – eligible expenses cost shared at 25% grant and 75% applicant for a maximum of $15,000/parcel.
  - ❖ On-Farm irrigation system upgrades – eligible expenses cost shared at 25% grant and 75% applicant for a maximum of $5,000/parcel.

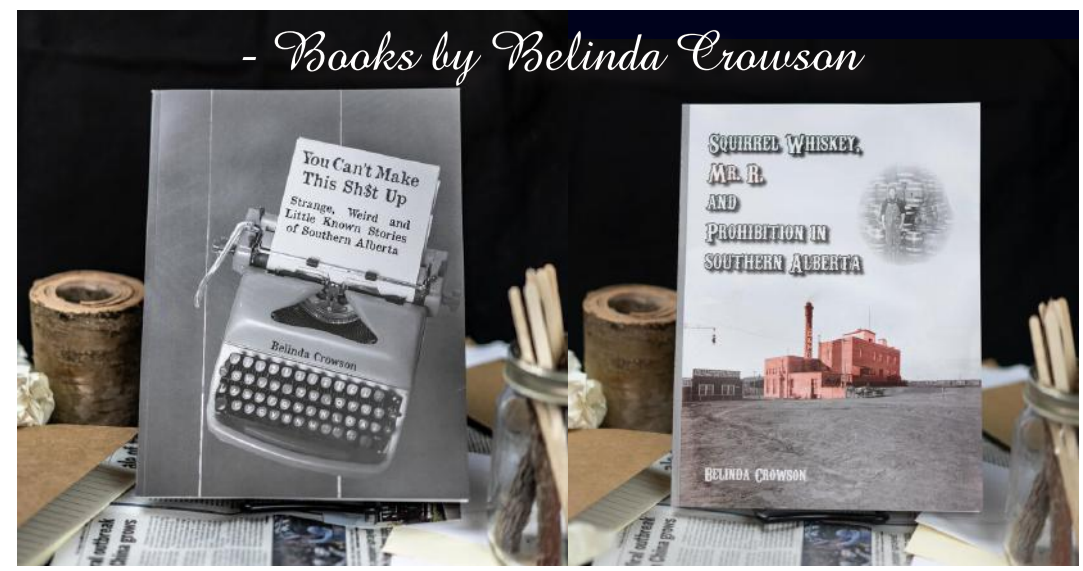
Email questions to irrigationefficiency@gov.ab.ca or call 403-381-5532

COUNTY WORD SEARCH

Can you find all the hidden words? Send a picture of the completed wordsearch to mwells@lethcounty.ca or text to 403-634-0147 to be entered for a chance to win an amazing pair of books, written by the one and only Belinda Crowson! Completed wordsearches can be submitted until April 2nd.
Good luck!

C P B T R E A R L Y C I N Q U E F O I L A M J
Y R U O T L R T X H O N Y E O P O W H Y J F O
L A L E A F Y W I L D P A R S L E Y I N A P N
A I Y H I T N P E R B A L L C A C T U S A K R
M R F H S B R A H G D H J O O I N E A E P N T
M I K I U Q C C E A A P B W A N E Y D Q R O H
I E M S C R U U O W T C V D E S S U E Q A A R
S G K T O O U Y I L A E B J E M O Z E W I F E
S O D A R A M R O G H R N M V I Q E W N R G E
O L N B C F V R R D B F E D G L E P R F I E F
U D N P E P E E E I R U T I U K K D E Z E B L
R E O W I L D B E G O N I A J V T H V T G L O
I N I O R P Q W E G E E S T T E O U L E R A W
M B N D I H U A O H T E E F M T E U I U O T E
I E O A A E T R R H I O M S R C P S S N U X R
L A E E R R G T Y O U T E E C H R P S C N E E
K N I E P I M S C A R L E T M A L L O W D P D
V R R T U F D D A G K A S H Q O F Q N U S E A
E N I H O O O L R W N S A G Z J X C M C E R V
T F A I C E L I U R V R G B D E R K L O L N E
C T R O U Y J W A R T S D E B N R E H T R O N
H U P Z S A E T Y P E W C Y H R A A B V E T S
R E H G T X E L B B G E A J A E D N B U T Z J
N R A T S G N I T O O H S T A O R H T K R A D

Silverweed
Leafy Wild Parsley
Prairie Groundsel
Missouri Milk Vetch
Three Flowered Avens
Scarlet Mallow
Darkthroat Shooting Star
Wild Strawberry
Plains Milk Vetch
Early Cinquefoil
Northern Bedstraw
Prairie Golden Bean
Ball Cactus
Prairie Crocus
Wild Begonia
Prairie Onion



- Local Business Spotlight -

UNLEASHING POTENTIAL: Lethbridge Therapeutic Riding Association and the Power of Community Partnership

Since its inception in 1976, the Lethbridge Therapeutic Riding Association (LTRA) has steadfastly upheld its commitment to enhancing lives through therapeutic riding and equine-facilitated wellness services. Rooted in the belief that caring transcends all barriers, LTRA has nurtured an environment where individuals with disabilities find strength, joy, and unparalleled freedom in the saddle.

For nearly six decades, LTRA has evolved, driven by the dedicated efforts of staff and volunteers, to offer a beacon of hope and empowerment. In 2023 alone, the organization proudly offered over 380 therapeutic riding classes, enriching the lives of participants with each stride. The summer camps, including a special session for newly landed Ukrainians, and the 'Horses in the Window' outreach program offered in partnership with the Community Foundation of Lethbridge & Southern Western Alberta, further underscore LTRA's unwavering commitment to community service and inclusion.

As a registered charity, LTRA is guided by a volunteer Board of Directors and an Executive Director, with the vision to be a Center for Excellence for Equine Facilitated Wellness in Southern Alberta. The mission is clear, to be a sustainable, charitable organization dedicated to discovery, inclusion, and learning by building relationships with and through horses in collaboration with our community.

Beyond its core therapeutic riding services, LTRA has embraced innovative approaches to wellness, including the introduction of an Expressive Arts Program offered through partnerships with Recreational Therapists. This program weaves together the therapeutic power of horses with the expressive potential of the arts, offering a unique pathway to healing and expression.

The recent generous donation from the Lethbridge Northern 4-H Beef club marks a

new chapter in LTRA's journey of community partnership and service expansion. This contribution not only underlines the shared values of community service and youth development but also paves the way for exciting new ventures. We extend our deepest gratitude to the Lethbridge Northern 4-H Beef Club for their generous donation and are proud to partner with 4-H organizations so deeply committed to bettering the communities in which they operate.

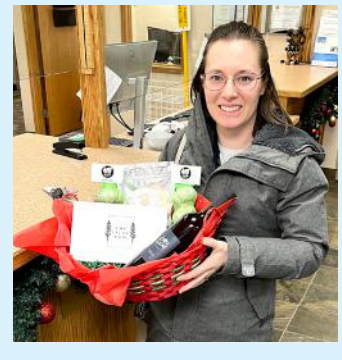
In a groundbreaking initiative, LTRA is forming a partnership with the Raymond 4H Club Equine Project, fostering a peer-to-peer mentorship group led by two visionary youth leaders Alora Skoog & Shelby Nelson. This innovative program aims to prepare LTRA clients for participation in a modified horse show in July, showcasing the transformative power of equine partnership and peer support. This collaboration with the 4-H community is a testament to LTRA's dedication to building bridges and creating opportunities for growth, learning, and shared experiences. It embodies the spirit of the Lethbridge County community— a community characterized by its generosity, collaborative spirit, and unwavering support for initiatives that uplift and empower.

As LTRA embarks on this new venture, it remains a proud member of the Lethbridge County community, thrilled to forge new partnerships and expand its services. These initiatives not only enhance the therapeutic programs but also enrich the lives of participants, volunteers, and the broader community, reinforcing the belief that together, we can achieve remarkable milestones.

The journey of LTRA, from its humble beginnings to its current status as a beacon of hope and wellness, is a vivid illustration of how community, compassion, and collaboration can create a lasting impact. The Lethbridge Therapeutic Riding Association invites you to join us in celebrating these new partnerships and the boundless future possibilities. LTRA wishes to express our heartfelt thanks to the residents of Lethbridge County for their unwavering support and neighborly approach to our services. Your ongoing support not only fuels our mission but also strengthens the bonds of our community, embodying the true spirit of collaboration and compassion. It is through your generosity, encouragement, and participation that we can continue making a meaningful difference in the lives of those we serve. Together, we celebrate the remarkable achievements made possible by this collective effort and look forward to fostering a brighter, more inclusive future for all!

Winner's Circle

Are you looking to be the next winner? Be sure to complete this edition's wordsearch puzzle on page 6 for a chance to win a pair of books, written by the one and only Belinda Crowson!



Wildrose Heritage Seed Company

Wildrose Heritage Seed Company is a family owned and operated business started by Shane and Tami Woods in 2013. It started small with us supplying one store in Lethbridge, "In Case Of", with packages of a variety of vegetable seed, grown ourselves. From there, we increased our sales to include greenhouses and other businesses across Alberta, Saskatchewan, and Southern B.C. In 2016 we decided to go online with our sales instead, and this year only have 3 stores selling our seed, Home Hardware in Lethbridge, Home Hardware in Coaldale and Garden Retreat in Calgary. The majority of our sales are now online.

We lease 8 acres of land just outside of Lethbridge to grow our crops, using only organic practices, although we are not certified organic. We sell no genetically modified hybrids and use no chemicals. Instead, we compost what we grow after the seed is harvested, and return the compost to the soil. As the vegetables mature, we harvest them, extract the seed, dry and clean the seed, package and label it, and the seed is ready for market. The process sounds simple but is a year round endeavor with a lot of hard physical work. Our daughter, Tianna, is now also involved as our sons were at one time as well.

Gardening is a life-long adventure for both Shane and I and one we have passed on to our kids. It was a necessity back in the day, when we were growing up, when the family food budget required supplementing. As our economy gets harder and harder to manage we feel more and more people will revert back to growing a garden and we intend to be there for them to provide a healthy, more economic alternative to what is in the grocery store.

Getting outside, getting our hands in the dirt, growing our own food is incredibly empowering and satisfying and if we can help people do that, it will all be worth it!

You can find us online at wildroseheritageseed.com. Email us at admin@wildroseheritageseed.com.

Lethbridge College Aggies Hit the Road

Students from the School of Agriculture have been on the road this academic year extending their learning opportunities at conferences and workshops across Canada. They have found it so enjoyable not being locked down online and just sitting behind screens as many did in High School.

In November, Agriculture Business students attended the three-day Ag Excellence Conference in Guelph, Ontario. They were able to tour the University, network with national industry partners and attend great sessions on agribusiness management. To top it off they were the only 'College' students there – we were well represented.

January saw the largest gathering with over 70 students attending the Irrigated Crop Production Update here at the new Agri-Food Hub in Lethbridge. Sponsored in part by Lethbridge College the conference sold out, hosting over 460 attendees and vendors. Students participated in a unique activity during the conference where they evaluated speakers and visited sponsors to answer questions needed for a bingo style assessment system. It increased engagement with industry and yielded some good prizes for those that did well.

Students in their final year of the Bachelor of Agriculture Science degree programming, along with Agriculture Business Major students attended the 2024 FCC Young Farmer Conference in January. Students learned a wide range of topics including farm finances, data management, succession planning, and the future of agriculture.

The Animal Science Majors were also involved with off campus training this year as well. They attended Farming Smarter Conference with the Agronomy majors totaling 54 students in all. Thanks to Jamie and Ken for their partnership rate. Students learned about pasture management and grazing techniques important to soil, weed mapping and soil fertility management essential to successful and sustainable production.

This month the Animal Science Majors are off to Calgary for the Alberta Beef Industry Annual Conference. This provides an opportunity for students to learn from, and network with, beef industry producers and professionals regarding the state of the Alberta Beef Industry, current and future trends, challenges, and opportunities.

These are a few of the major events our students have attended this academic year, in combination with dozens of local tours and industry visits. Another bonus of our students learning in the non-traditional way is that it reinforces what they have learned in the classroom. It validates our curriculum and helps prepare students for their future careers.

At the College we talk about 'Life-long Learners'. To foster that concept, we feel that having students attend conferences, review current literature, and visit industry partners in their fields, barns and factories allows our students (and instructors) to stay current and truly be life-long learners.

We are also pleased to announce that one of our first Bachelor of Agriculture Science alumni has applied for and been accepted by the Alberta Institute of Agrologists for the Agrologist-in-training designation. As the bachelor's degree was designed following guidelines of Alberta Advanced Education the requirements of the AIA were also matched. After two years of work experience they will be eligible for their P.Ag status. Our second batch of degree students are set to graduate this spring.

The Commercial Greenhouse Technician program is another new learning opportunity for Aggies on the road from Lethbridge College. This certificate is designed for workers to take online courses while gaining work integrated learning at their place of employment. The first cohort of students began in January and another cohort will begin in September. Students will complete most of their training within their own greenhouse with some field trips to other industry partners and our greenhouse at Lethbridge College.

Funding for these off-campus activities this year have been provided in part by the Ronald Tiffin Endowment Fund, HyTech Production, Alberta Grains, Farming Smarter, Alberta Beef Producers, and Alberta Feeders Association. If you are interested in sponsoring a group of students to attend a conference, provide scholarships or equipment, help finalize funding for our academic greenhouse, have a student group tour your business, or would like to know more about our programming please contact Byrne Cook, Program Chair. (b.cook@lethbridgecollege.ca) Our goal is to provide the best training opportunities for our students possible, and that includes having the Aggies hit the road when they can.

University of Lethbridge

UNIVERSITY OF LETHBRIDGE-LED STUDY SHOWS PRAIRIE WETLANDS EMIT LESS METHANE THAN EXPECTED

Inland waters including ponds and wetlands are one of the largest natural sources of methane. Pound for pound, methane is a far more potent greenhouse gas than carbon dioxide. Now, a University of Lethbridge-led study has found that many of the ponds and wetlands dotting the Canadian Prairies emit less methane than predicted due in part to their elevated salt content, making previous estimates highly inaccurate.

"We came up with new prairie-specific models and estimates that were much lower than expected based on models developed in other parts of the world," says Dr. Matthew Bogard, a ULethbridge biology professor and Canada Research Chair in Aquatic Environments. "We were very conservative in our calculations and even so, we found that emissions were drastically overestimated."

Bogard and Dr. Cynthia Soued, a ULethbridge post-doctoral fellow at the time of the study, partnered with scientists from Ducks Unlimited Canada and the universities of Regina, British Columbia and McGill. Their goal was to develop an understanding of methane emissions from inland aquatic systems in the Prairie Pothole Region, which includes Alberta, Saskatchewan and Manitoba.

The researchers assembled new and existing data from nearly 250 aquatic ecosystems across the Canadian Prairies. They used advanced sensors to monitor real-time emissions at two wetlands and assembled data from other regions where salty systems exist.

WHY IS THIS IMPORTANT?

The findings from this study become important for Canada and other regions when decisions are being made about draining or preserving wetlands and ponds.

"Wetland drainage on agricultural land is a hotly contested topic in the prairie provinces these days," says Dr. Kerri Finlay, a professor at the University of Regina and lead co-author of the publication. "Our research now shows that intact wetlands and ponds in this region are much lower emitters of methane than previously assumed. Draining wetlands will instead create large pulses of greenhouse gas emissions, far beyond anything we see if a wetland is preserved."

Methane emissions are only one component of the carbon cycle in these ecosystems. Plants also suck up carbon dioxide from the atmosphere to build biomass and lock away vast amounts of carbon in the mud at the bottom of these ecosystems. Bogard says years of work are still needed to understand the full balance of carbon cycling in prairie ponds and wetlands, but in the meantime, their benefits shouldn't be overlooked.

"These systems provide many different ecosystem services to us for free that are worth over $20 billion a year in Canada alone," Bogard says. "They store water, so they buffer floods and droughts. They provide cooling as water evaporates into the atmosphere. They are refuges for birds, amphibians and animals that we hunt. They also filter and process nutrients and toxins out of our water."

Dr. Matthew Bogard
Biological Sciences

Grow Me Instead

Submitted by: Alberta Invasive Species Council

Some plants originally introduced as garden flowers for landscaping, or their medicinal or food value, have jumped the fence to become invasive in the natural environment. Invasive plants are spread by people and our activities, and while only a small percentage of introduced ornamentals have become invasive, effective action needs to be taken to avoid planting species known to escape the garden. Choosing suitable non-invasive alternatives and being plantwise can help prevent future spread and serve to protect and preserve Alberta's natural environment.

Although spring is on its way and you may just be starting to prep the garden, there are still ways for you to be plantwise!

• Plan your garden! Avoid pre-packaged wildflower mixes and purchase non-invasive exotic or regional native plants. It helps to do your research and ask your local garden centre or horticulture expert.

• Use mulch in open garden areas to prevent invasive plants from establishing this season!

• Avoid collecting 'wildflowers' from roadsides or natural areas. Many are overly aggressive invasive plants and could transfer seeds to new areas. Identify common listed invasives and species of concern with the Invasive Plants of Alberta Identification Guide (scan the QR code).

• Treat and remove existing invasive plants, even plant skeletons, using species-appropriate methods - check out the Alberta Invasive Species Council fact-sheets (scan the QR code) for control methods.

• Properly dispose of invasive plants by removing them before flowering and double-bag to dispose of them in your local landfill - never compost invasive plants!

There are many ways to make a difference in your community and help protect our province from the impacts of invasive plants through horticulture. Use the latest Grow Me Instead brochure (scan the QR code) to plant that seed early!

Control Methods *Grow Me Instead Brochure* *Weed Guide*

YOUR PLAN, YOUR FARM, YOUR FUTURE.

The Alberta Environmental Farm Program covers an entire farm using a self-assessment tool to help producers identify their potential on-farm environmental risks. At the completion of the program, the farmer has an itemized list of adjustments that can be made in their operation. The EFP is a useful tool for analyzing a farming operation and guiding changes as time and resources allow.

Register today to start your EFP workbook at albertaefp.com

YOUR EFP IS...

- ✓ Confidential
- ✓ Free with an easy renewal process
- ✓ Supported one-on-one by a trained EFP technician
- ✓ Valid for 10 years with an easy renewal process

BENEFITS OF AN EFP

- Demonstrate environmental stewardship
- Understand and reduce potential environmental risks
- Can reduce costs, increase efficiency, access funding
- Use as a future planning tool

WANT MORE INFORMATION?

Find us at
1-587-200-2552
info@albertaefp.com
www.albertaefp.com

We offer one-on-one assistance!
Reach out for help with your EFP

Scan the code to join our events

Sustainable Canadian Agricultural Partnership

AN ARECA INITIATIVE

Alberta

Canada

HELPING WILDLIFE
during baby season

ALBERTA INSTITUTE FOR WILDLIFE CONSERVATION

Submitted by:
Scottie Potter, Communications Coordinator for the Alberta Institute for Wildlife Conservation

With spring comes the beginning of birthing and nesting season for most of Alberta's wildlife, and this coincides with the busiest time of year for us at the Alberta Institute of Wildlife Conservation (AIWC). As a wildlife rehabilitation facility, we see the number of incoming animal patients skyrocket from an average of 20 in March to over 500 patients come June. This wave of wildlife in need is composed primarily of animal babies orphaned or abandoned due to human-wildlife conflict. We strive to return as many of these youngsters back to the wild, but an arguably even more important goal is to prevent them from arriving at our doors in the first place.

I found an orphaned animal, what do I do next?

Before getting into other actions you can take to help wildlife, it's always best practice to call our Wildlife Hotline before taking steps to rescue a potentially injured or orphaned animal. Every situation is different, and may require specialized instructions our expert team can provide. Calling our hotline before rescuing an animal can prevent injury to yourself and the animal in question. Some animals can also seem in distress, but are in fact exhibiting normal behaviour for their species and may not need rescuing at all.

The Wildlife Hotline (403-946-2361) is monitored daily from 9:00 AM to 5:00 PM (August to April), and 9:00 AM to 9:00 PM (May to July).

Prevention is the best medicine

Sometimes an animal will choose to build a nest in a location that causes problems for people or may be dangerous to the animal. However, it can be even more dangerous to try and relocate the nest, which is why we do not offer nest relocation services. Preventing animals from nesting in a certain location in the first place is safer and more effective for everyone involved! What works as a deterrent is different for each species, so we recommend calling out Wildlife Hotline for tips on handling the situation.

Leave that baby hare there!

As mentioned earlier, an animal that seems in need of help may actually be doing just fine, which is often the case for baby white-tailed jackrabbits. These lanky hares thrive in towns and cities across Southern and Central Alberta, making it easy for us to stumble across their nests full of babies (called leverets), often without a mother hare in sight. This might seem like a sign of orphaned or abandoned baby hares in need of help, but mother hares deliberately leave their young on their own for hours at a time. Leverets are born without scent, and a mother hare that spends too much time with her young can transfer her scent to them, exposing the leverets to predators. That's why, unless it is clearly injured, the best thing you can do is leave a baby hare right where it is! As always, if you're unsure, please call our Wildlife Hotline.

Orphaned ducklings

Over 20 species of duck breed in Alberta, so knowing how to identify a duckling in need is a good skill to have. The most important thing to look for is the mother, as ducklings can't survive without her. Ducklings are more fragile than they appear, and can die quickly from hypothermia or malnutrition without care from their mother or a licensed wildlife rehabilitator. If a mother duck does not claim the ducklings within 45 minutes help is needed — call our hotline!

Mother ducks also will not abandon their young if they're exposed to human scent. That means, if a duckling is trapped or otherwise separated from their mother, it is a-okay to pick the duckling up and unite them with their family. The mother duck should claim her duckling, and if she doesn't, call us!

Balancing the scales

Our actions can have extensive negative impacts on nesting wildlife, but there are ways we can balance the scales and incorporate these animals' needs into our planning. One of the more effective (and fun!) options is providing nest boxes on your property. Nest boxes not only give animals a specific space to raise their young, but can also give you the chance to observe them in action. This also reduces the likelihood of an animal nesting in an undesirable or dangerous location.

Be considerate of wildlife

Reducing our impact on wildlife this time of year (indeed all year-round) often comes down to thoughtfulness and consideration. Many spring projects are undertaken without considering the impacts on animals we share our space with. You may be ready to remove an unused building or dead tree on your property, but old wood provides refuge for all manner of newly formed animal families, from woodpeckers to flying squirrels. Taking these animals into consideration can be as simple as checking for nests before taking action, or even better, removing these structures outside the primary nesting season, in fall or winter.

Knowing which species live in your area, what their lifecycle is like, and where you might encounter them can also reduce your chance of overlooking their nests. Ground-nesting bird nests, for example, are often damaged during mowing because people simply don't expect to encounter them, especially on the prairie where they can be well hidden.

We all benefit from becoming more thoughtful neighbours to animals, and there is no better time to start that journey than when nesting wildlife is most in need.

COVER CROPS IN WATER SCARCITY:
How to Find the Fit

Submitted by:
Scott Gillespie, Plants Dig Soil

PLANTS DIG SOIL CONSULTING LTD.

You could say I was skeptical about cover crops during my talk at the Nutrient Management Webinar, but I prefer to be realistic. The more I've delved into the science behind them, the more I've discovered that they may not be suitable for our area, especially during a drought. During the webinar, I presented a study that indicated you need 675mm (or 27 inches) of annual rainfall for cover crops to break even. Beyond that threshold, they start to yield returns. Given that we typically receive 14 inches of rain and only half of that last year, it's a tough sell.

The results were quite clear: cover crops lead to reduced water availability in all precipitation regions. This reduction is beneficial in areas where there is typically excess water during seeding time. Additionally, cover crops resulted in lower nitrogen levels at cash crop seeding. This effect is more pronounced in dry areas and less certain in wet areas. There is a caveat, though – this decrease in nitrogen occurs at seeding time and can be remedied by increasing nitrogen rates. It may also be a short-term effect, which I will address later. Finally, cash crop yields were diminished in all but the wettest areas. In regions with excessive rainfall, cover crops can enhance field trafficability, improve nitrogen capture and release efficiency, and potentially reduce root diseases by minimizing water saturation.

So why is there such a push for cover crops? They do offer benefits. The problem lies in the short-term financial implications. I view this situation as analogous to human health. It's challenging to maintain a healthy diet, engage in physical activity, and get sufficient sleep. However, as we age, the consequences of unhealthy habits catch up to us.

The primary advantage of cover crops is their ability to protect the soil during the off-season. On dryland, practicing no-till agriculture accomplishes this without the need for cover crops. On irrigated land, crops such as potatoes, sugar beets, and dry beans may require the use of cover crops to protect the soil.

Once your soil is covered, assess your water infiltration and storage. Residue alone may not provide optimal water infiltration. A cover crop can help build aggregates and create fresh tunnels for water to penetrate the soil. In times of abundant water availability, growing a cover crop assists in supplying sugars to the microbes below. When these microbes have access to sugars, they do not degrade organic matter as rapidly. Consequently, the aggregates remain larger and more cohesive. The deeper these beneficial aggregates extend, the faster water can infiltrate, and the more storage capacity is available.

I mentioned earlier that I would discuss nitrogen, and this is where I will address it. Cover crops can help regulate nutrient flows. However, initially, they require more nutrients.

I grew up on a farm in southern Ontario in the 1980's and 1990's and observed my dad transition to no-till. Yields initially declined and there was a need for extra nitrogen. When tillage ceases the residue remains on the surface instead of decomposing and contributing to your nitrogen requirements. This necessitates increased nitrogen (and other nutrient) applications to compensate. After a few cycles, the older residue begins to break down through soil contact and earthworm activity. At that point, the fresh residue contains the nutrients from the most recent crop, while the older residue supplies nutrients to the current crop as it decomposes.

Cover crops operate in a similar manner. A study conducted in Washington demonstrated this possibility. The region experiences dryland conditions with 16 inches of normal annual rainfall. The study compared a fallow / winter wheat rotation with a winter pea / winter wheat rotation. The winter pea was terminated after flowering but before pod formation, which balanced water usage and biomass production.

Unfortunately, the article is behind a paywall, but I will provide the link for it in case you are interested. Initially they saw small gains yield. The real effect showed up in time. At the ten year mark they were able to use half the nitrogen to attain the same yield as a fallow system.

So why did this one work when the meta-analysis says that it shouldn't? It's much below the 27" annual precipitation that they found. The difference that I was able to see is that the winter pea gave ground cover to the wheat crop. In the fallow year it appears most of the residue was broken down by the soil critters and microbes. This soil cover led to lower soil temperatures and it helped to trap more water. This, combined with the added nitrogen from the legume, added up to a win for cover crops.

Some might argue you could take the pea crop to a cash crop and make more money. However, if it doesn't leave the cover that a terminated crop does, leaves less water for the wheat crops, and doesn't leave as much nitrogen behind, it could hurt the winter wheat more than the gain made with the pea crop.

Considering our ongoing drought and imminent water restrictions, I do not recommend planting cover crops at this time. The exception to this recommendation is if the soil is at risk of erosion. It is crucial to take all necessary measures to prevent soil erosion. We know that seasons can change unexpectedly here, so if the drought suddenly breaks, be prepared for the return of rain. Familiarize yourself with your fields and identify areas that might benefit from cover crops. The benefits are undoubtedly there; we just need to be patient, as the timeline for realizing these benefits could span decades.

Pheasants Forever Raising Awareness of the Value of Roadside Ditches and Undeveloped Rights-of-Way

Submitted by: Ken Bailey

Roadside ditches and undeveloped county rights-of-way may provide the only sanctuary for a broad array of insects, birds, reptiles, and mammals, but an agricultural practice known as trespass farming is threatening these last vestiges of intact wildlife habitat.

That's why Pheasants Forever Canada (PFC) is launching a campaign to bring awareness to the issues of trespass farming and the associated value of intact roadside ditches and undeveloped public rights-of-way. Bolstered by a grant of $256,000 from Alberta Environment and Parks (AEP; currently Ministry of Environment and Protected Areas), the upland bird habitat conservation organization advocates that while it's no secret that edge habitat is critical for wildlife in all landscapes, seldom is it more so than across the vast tracts of cultivated land that dominate parts of southern Alberta.

Fortunately, AEP has recognized the issue and has turned to PFC to inform, educate, and spark change in the attitude towards these critical edge habitats, noting that the benefits accrued to society when these strips remain intact goes well beyond their wildlife habitat value.

Roadside ditches and rights-of-way are public land in Alberta, typically owned by the province and managed by local municipalities. In the tough economic climate that producers face, cultivating through these ditches and undeveloped rights-of-way is both easy and practical. To many producers, it makes sense to put those linear acres under production, often unaware that the societal benefits they provide far outweigh the farm revenue they potentially generate. That's where PFC comes in.

"Ditches and rights-of-way have been broken and farmed at an elevated rate in recent years," says Perry McCormick, president of PFC. "It's not uncommon to see ditches farmed to within inches of the road grade. Further, corporate farming has led to larger fields, and many rights-of-way that at one time supported critical edge habitat on each side of the trail have disappeared. When left undisturbed, these strips of land provide a wide range of benefits to all Albertans," says McCormick. "With 85 percent of the natural wetlands lost across the Prairies, we recognize that ditches play a critical role in flood attenuation, water filtration and purification through the absorption of excess nutrients, carbon sequestration, and biodiversity protection and enhancement. Roadside ditches and rights-of-way also provide critical habitat for grassland-dependant birds, including pheasants and grey partridge, as well as for a broad suite of mammals and insects, including at-risk pollinators. Our job now is to help make the public, including the agricultural community, aware of these societal benefits."

While advocating for the elimination of trespass cultivation, PFC acknowledges that vegetation management of roadside ditches is necessary.

"We understand that periodic grazing or haying of roadside ditches is important for vegetation management and in times of extreme drought," says McCormick. "We simply ask that when this management is necessary, producers wait until July 15, thus ensuring that nesting birds will have completed this important aspect of their life cycle."

PFC's two-year awareness campaign will include news releases, advertising on radio and in newspapers, billboards, and placement on key websites. Two field tours are planned for mainstream media members to provide them with a first-hand look at the issue. PFC also has plans to meet with individual municipal authorities to discuss issues and opportunities moving forward. The PFC volunteer-led chapter in Calgary will play a vital role in supporting the delivery of this awareness campaign.

PFC was formed in 1992 and is dedicated to the conservation of pheasants and other wildlife populations in southern Alberta, primarily through enhancing the quantity and quality of habitat. Their programs include planting trees, shrubs, and grasses to create safe corridors for wildlife travel and protective cover, planting nesting cover for ground-nesting birds, and developing riparian buffer zones. An education campaign highlighting the threat to roadside ditches and undeveloped rights-of-way is a natural extension of their mission, says McCormick.

"We want to make people, including producers, municipalities and the general public, aware of the importance of retaining these critical strips of natural cover," McCormick says, adding that their public messaging will begin this spring. "As we all know, recognition that there is a problem is the first step in solving it, and we're proud to be leading this government-sponsored initiative to bring awareness to the threat of trespass farming."

Those interested in learning more about PFC and their conservation programs are encouraged to check out their website at www.pheasantsforever.ca or contact PFC's president at perry@pfcalgary.ca

New NRCB operational guideline for portable calf housing (hutches)

Submitted by: National Resources Conservation Board (NRCB)

The Natural Resources Conservation Board (NRCB) has updated its approach to the regulation of portable calf housing (hutches) in response to industry and market changes.

Portable calf housing is no longer viewed as short-term manure storage under the Agricultural Operation Practices Act.

More information is available in the NRCB's new Operational Guideline 2023-1: Portable Calf Housing (Hutches). The NRCB has also updated its Short-Term Solid Manure Storage Requirements fact sheet to reflect this change.

Please contact your local NRCB field office if you have any questions:

Peace/North Central regions (Morinville)
780-939-1212
Central region (Red Deer/Airdrie)
403-340-5241
Southern region (Lethbridge)
403-381-5166
(Dial 310-0000 to be connected toll free)
Or email us at: info@nrcb.ca

Updated NRCB Approvals Policy for confined feeding operations

Submitted by: Natural Resources Conservation Board (NRCB)

The Natural Resources Conservation Board (NRCB) has released an updated Approvals Policy for confined feeding operations in Alberta. The 2018 policy was updated to improve transparency and clarity regarding Agricultural Operation Practices Act (AOPA) requirements and their interpretation, reflect current practices, and incorporate feedback that was received.

The updated Operational Policy 2016-7: Approvals incorporates:

- input from the Policy Advisory Group representing Alberta's four major livestock sectors (beef, dairy, pork, and poultry), the Intensive Livestock Working Group (ILWG), municipalities, and the non-government environmental sector
- feedback from stakeholders, including AOPA permit applicants
- feedback from NRCB approval officers
- guidance provided in decisions by the Board of the NRCB
- updates to reflect current practices.

The policy is available on the NRCB website at www.nrcb.ca.

Update from SMRID:

Photo: Coffer dam and preparation for the initial concrete pour by VHL (fall 2023). Photo courtesy SMRID.

Submitted by: SMRID

Snowpack and Water supply: Due to drought conditions last year, both headworks and internal reservoirs were drawn down in the fall and are at lower than average winter levels. At the time of writing, District and Headworks storage is at a combined 47% of targeted winter volumes. Snowpack is also below average but we are still in the early-growth part of the curve (typically, most snowpack accrues post January). There will be monthly updates about snowpack and forecast water use allocations for the coming year on SMRID's website.

Modernization Program:

SMRID is completing work on several modernization projects in the spring of 2024. Due to the size of the District, as in past years, work is being spread across Southern Alberta with most construction this year taking place in the County of Cypress and the MD of Taber. The focus of this spring's modernization program is the rehabilitation of deteriorated, open canal systems and their conversion to buried pipelines. The level of effort on these District pipelines is approximately $54 Million, inclusive of materials and construction. 3 projects are located in Cypress County, west of Medicine Hat, as well as the M Big Bend pipeline project in the MD of Taber. The projects are being implemented through the Alberta Irrigation Modernization (AIM) Program. Through the AIM program, the province and the District are contributing 30% and 20% upfront, respectively. The remainder is being financed through a long term, low interest loan with the Canada Infrastructure Bank. This is the 4th year that the SMRID has participated in the AIM program, with AIM projects expected to continue through to 2028/2029.

Chin Chute Rehabilitation:

In addition to SMRID's pipeline projects, Chin Chute rehabilitation is a $24.5 Million dollar project that is being completed this year in Lethbridge County. It involves the replacement of a 73-year old cast-in-place concrete chute structure that was constructed by the Prairie Farm Rehabilitation Administratin (PFRA) in 1951. Chin chute takes water from the St. Mary Main canal and conveys it to Chin reservoir. The difference in elevation from the top of the chute structure to the reservoir varies over the course of the summer but it is an approximately 40 metre drop in elevation (131 feet) when Chin reservoir is at Full Supply Level.

The project is being cost-shared with the Raymond Irrigation District (RID) with funding for the project financed by the SMRID's Irrigation Rehabilitation Program (IRP). The IRP is a cost-shared program supported by the Province, with the government covering 75% of costs and the District covering 25%. The general contractor for the project is Dennis Dirtworx of Coaldale, Alberta. The concrete sub-contractor is VHL construction of Taber, with the concrete being supplied by Inland Concrete of Lethbridge. Construction is expected to continue over the summer of 2024 with the Chute substantially completed for the 2025 irrigation season. The design and engineering for the Chin Chute replacement was completed by MPE Engineering of Lethbridge.

Planned Future Construction:

Cameron Extension Pipeline: SMRID is planning to rehabilitate the Cameron Extension Concrete Lateral Canal, located east of NE reservoir (also know by locals as CPR Lake). The Cameron extension pipeline serves approximately 5,850 acres. MPE Engineering is working on the preliminary design and construction is expected to be tendered to local contractors for installation in 2024 or 2025.

Malloy Drain: SMRID, the Town of Coaldale and Lethbridge County are collaborating on the next phase of the Malloy Drain Project. The focus of the upcoming work is the construction of Storm Water Management Ponds (SWMP) to alleviate flooding in the area. MPE is completing the design of a SWMP pond to be constructed south of Cottonwood, with work planned to integrate the existing, unused raw water storage ponds that are located near the Coaldale ball diamonds. The conversion of the raw water ponds into stormwater ponds would further buffer flooding caused by moderate to heavy rainfall and runoff events.

LNID continues to move forward with its Capital Project Plans

Submitted by: Lethbridge Northern Irrigation District (LNID)

This is the start of a new irrigation season, and the Board and Staff would like to apprise water users that the leak in the Alberta Agriculture and Irrigation Main Canal will be at substantial completion of all in-canal work by March 31, 2024 and total clean-up by May 31, 2024. The District again expresses their genuine appreciation to all water users for their patience and understanding through last year's turbulent time and to Alberta Agriculture and Irrigation for completing the necessary repairs.

The District is pleased to announce that the Lateral K2 gravity pipeline project serving approximately 3,137 irrigation acres in the Turin area is almost complete and will be ready to convey water for the 2024 irrigation season.

Wilde Bros Engineering along with Sub-Terrain Excavating has commenced construction of approximately 1,500m of canal along the Picture Butte Reservoir. The purpose of this design is to reduce the amount of silt and organics that enter these pipelines and improve delivery to the pipelines serviced on the east side out of Picture Butte Reservoir. This project covers the 8,851 irrigation acres that are serviced by the Lateral H5, H8, and H9 Pipelines.

The District continues to move forward with its Capital Project Plans as well as maintain the existing infrastructure, and in doing so, continues to improve efficiency in delivering non-potable water throughout the District.

The District's Annual General Meeting is planned for Thursday, April 18, 2024, 1:30 pm, at the Picture Butte Community Centre. We are pleased to announce that Dennis Matis, Infrastructure & Operations Manager of the Oldman River Basin, Alberta Agriculture & Irrigation (AGI) will be giving a presentation on the water status at that time. Please contact the District office or check the District website for details. If you would like a copy of the 2024 Annual Report, you can view it on the website at www.lnid.ca, or contact the District Office for a copy to be forwarded to you.

Given the fluctuation of the current water situation, and the forecast for drought conditions in 2024 the LNID would like to advise you to continue to keep informed through the LNID communications that are posted on the LNID website as well as the individual emails sent out. If we do not have your email and you would like to receive updates, please contact the District Office with your information.

The District would like to thank all irrigators for the considerable contribution in working on improving water savings in our District by switching their irrigation to more efficient methods. Communication and cooperation between Water District Coordinators and landowners continues to support increased efficiencies and produce better water delivery.

Also note that there are Board Elections this year for Divisions 1 and 3. The close of nominations for these electoral divisions is 4:00 pm Friday, April 12, 2024. The Election date is set for Thursday, May 9, 2024, if one is required.

We are very excited to share that the District is working on a new District Website, which should be up and running late spring of 2024!

The Board and Staff of the LNID continue to do their best to support all Water Users!

Alberta AgriSystems Living Lab - *A Year in Review*

Submitted by: Alberta AgriSystems Living Lab

The goal of the Alberta AgriSystems Living Lab (AALL) is to test the value of academically researched Beneficial Management Practices or BMPs in real life situations on farms and ranches in Alberta. The AALL teams up producers with researchers to measure and analyze the economic and environmental impacts of BMP implementation. Having producers and researchers co-develop their projects will give the industry results that have practical applications and consider the social, economic and environmental factors of BMP adoption. Our hope is that these practices will improve profitability and/or productivity, while also demonstrating environmental benefits, such as improving carbon sequestration or reducing greenhouse gas emissions (GHGs).

An example of an AALL project looking at environmental benefits as well as improving the economic bottom line for producers is Susan Heather's Italian ryegrass/wheat intercrop outside of Vulcan. "We were looking for a crop that will keep growing, cover the soil and protect it from erosion and we also have a need to make a few more tons off of the land we already have rather than trying to expand our land base," said Heather. In general, this project will measure the impact of the cover crop on soil health and carbon sequestration.

The AALL has 30 core producer participants and is partners with Agriculture and Agri-Food Canada and University of Alberta researchers. Producer participants are crop and/or beef cattle producers from three key Alberta regions: Lethbridge, Central and Peace. Each producer selected and implemented at least one BMP, and some producer partners chose to implement multiple BMPs.

Here are the BMPs currently implemented through the project:

- Adaptive Multi Paddock (AMP)/rotational grazing
- Extended grazing
- Pasture/hayland rejuvenation
- Bale grazing
- Precision feeding
- Poly cropping
- Nitrification inhibitors
- Environmentally smart nitrogen
- Variable rate fertilizer
- Cover cropping
- Intercropping
- Compost management/application
- Soil amendments

In the winter of 2023 participants worked directly with researchers to co-develop the BMPs they would be interested in trying on their operation and determining how best to implement the BMP for their individual operation. And what a growing season 2023 was! Drought, pests, fires, smoke…these environmental challenges tested the collaborative approach of the AALL and amplified the importance of doing this work under real farming conditions. "Sometimes mother nature throws you a curveball and doesn't stop" says Kelly Hall, a producer partner working on a polyculture project outside of Parkland. The weather challenges in 2023 demonstrated how quickly producers must adapt to modify the growing plans, grazing rotations, equipment selection and labour and other resource allocation.

In preparation for the 2024 growing season participants will be meeting with the researchers to review preliminary data, discuss what went well with their projects in 2023 and what learning opportunities can be used to build a more successful experience in 2024.

AALL is also working with three Indigenous communities including the Blood Tribe and has been consulting with each nation on their BMP of interest, which members will be involved and how their data will be respected. Over the past year we have worked with these communities to hold collaborative learning events focused on soil health and the result has been a positive exchange of information and the building of relationships. A recent webinar 'Understanding the Land' saw the collaboration of the AALL with the Bridge to Land Water Sky & the ê-kanâtahk askiy SAGE Project to learn and share knowledge about soil health from an indigenous and western soil science perspective. A recording of the webinar is available on our website.

The AALL has more growing seasons and project years ahead to help Alberta's producers understand the value and impact of BMPs. Projects and practices are not only examined from a scientific perspective of carbon sequestration and greenhouse gas emissions reduction but also from an economic, social and a practical perspective. This important work is performed by another AALL partner: Canfax. This work gives partner producers a cost of production (COP) analysis based on their specific operation and this helps understand the cost and value of implementing a BMP. As well as a whole farm carbon balance, using the HOLOS model, to help identify whether they are net emitters or sequesters and where their greatest opportunity for influence on carbon sequestration lies. This work will help producers and policy makers with cost/benefit decisions and potential future policies and programs.

Another example of the work Canfax is contributing to the AALL is industry scanning and surveys. A recent survey conducted with the broader farming community indicated 49.6% of producers entered farming because they want to become part of a proud farming heritage. These kinds of results from surveys help to shape how the AALL shares information with the farming and ranching communities.

While we don't have capacity to initiate projects with every interested producer we do want to ensure that any interested producer is able to learn from the experience of the participating producers and researchers in an effort to grow the knowledge of the larger agricultural community.

Want to learn more with us?

- Field days – join us in field to see the growing conditions and farming and research practices in action
- Webinars/videos – can't make it to the field? Join us online to hear from our producers and experts
- Articles – need to schedule learning on your varied availability? Take a read of our growing library of knowledge articles
- Peer groups – want to hear, share and question ideas in real time? Look for our upcoming peer to peer conversation events

For more information on the AALL or ways to participate in any of our learning events check out www.agrisystemsll.ca

The AALL is led by Alberta Beef Producers and supported by industry partners including Ducks Unlimited, the Beef Cattle Research Council, Alberta Cattle Feeders' Association, Corteva Agriscience, Alberta Grains, Alberta Pulse Growers, Alberta Canola Producers' Commission, Canola Council of Canada, Alberta Beekeepers' Commission, Alberta Conservation Association, Verified Beef Production Plus; with research support from Agriculture and Agri-Food Canada and the University of Alberta . The project is funded, in part, by Agriculture and Agri-Food Canada through the Agricultural Climate Solutions – Living Labs program.

Photo credit: Alberta Agriculture

Lethbridge County offering assistance to implement dragline-based liquid manure systems

In partnership with Alberta Milk and Alberta Pork, Lethbridge County is offering assistance to livestock operations to encourage the adoption of dragline-based liquid manure application systems.

Producers may be familiar with the practice, which involves using temporary or semi-permanent pipelines to transport liquid manure from the storage facility to land intended for manure application. The systems typically directly inject liquid manure into the receiving soil. This practice has a variety of benefits, like increased use efficiency, faster manure application, and a reduction in odour and flies. It limits the need for heavy truck traffic on County roads, reducing transportation costs for the operator and improves safety for motorists. Using these pipelines instead of hauling manure can save on road maintenance costs, too.

Despite these benefits, there can be challenges to implement these systems. The supply pipelines usually need to cross roadways to reach the land intended for manure application, and there is not always ready access. To help with this, producers can apply to Lethbridge County for financial and technical assistance to install these systems.

Eligibility:

- Livestock operations experiencing barriers implementing dragline based liquid manure application systems due to access limitations.
- Custom liquid manure applicators operating in the County where there is a proven benefit to its customers.

Cost share:

- 50% of the cost to complete the approved installation at the agreed upon road crossing location, to a maximum of $5000.
- Cost share can be cash rebates or construction and/or materials supply support.

Other details:

- Each application must be pre-approved and installed to County specifications.
- Proposed projects will be prioritized according to application timing and the assessed benefit.
- The County will work with producers/custom applicators to determine the optimal crossing.

Applications for this program will open in April 2024, and will be available at www.lethcounty.ca.

For more information, please call 403-732-5333.

Lethbridge County Equipment Available

Producers wishing to rent or borrow equipment can call the Agriculture Services at 403-732-5333.
Some equipment is available for delivery – please call for more information.

For Rent (Includes Delivery and Pick Up):

Please call for current rental prices

2x8 foot Brillion drills (appropriate for seeding grass and Alfalfa on land that has been previously worked) - $210.00 minimum or $7.00 per acre

To Lend:

(Left) Kirchner Ag Plastics roller for grain bags or silage plastic. (Right)Skunk Traps

To Lend:

(Clockwise from top) Magpie Traps. Chisel Plow with Lister shovels for emergency soil conservation. Plastic Mulcher for seedlings or strawberries (does not include mulch). Tree Planter for seedlings. Mobile Solar/Wind Turbine Trough.

Upcoming EVENTS

Opportunities for Value Addition in Agri-food Industries

- Event Date: March 6th
- Event Type: in-person
- Location: Coast Hotel and Conference Centre, followed by lab tours at Lethbridge College
- Time: 8 am- 1:30 pm
- Details on QR Code

Alberta Pork Semi-Annual Meeting

- Event Date: March 14th
- Event Type: In-Person
- Location: Coast Lethbridge Hotel & Conference Centre
- Time: 3 pm start time, with meal to follow

Reality Shift: Discovering Research and Innovation for Businesses and Public Safety

- Event Date: March 14th
- Event Type: In-person
- Location: Lethbridge and District Exhibition Agri-food Hub and Trade Centre
- Time: 8:30 am – 1:30 pm
- Details on QR Code

Virtual Pesticide Applicator Workshop

- Event Date: March 21st
- Event Type: Online
- Time: 8:30 am – 4:00 pm
- Details on farmingsmarter.com/events

Shelterbelt Workshop

- Event Date: April, date TBD
- Event Type: In-person

Farming Smarter Field School

- Event Date: June 26th & 27th
- Event Type: In-person

Alberta Open Farm Days

- Event Date: August 17th
- Event Type: In-Person

Global Crop Production Conference

- Event Date: December 11th
- Event Type: In-person

Have an upcoming ag-related event you'd like to showcase?
Please submit to mwells@lethcounty.ca to include in future newsletters.

NUTRIENT MANAGEMENT WEBINAR SERIES

This winter, Lethbridge County hosted our annual Nutrient Management Webinar Series. The presentations were outstanding, with topics that included:

- Cover crop clarity: simplifying selection for Alberta's farming realities
- Nutrient management in organic farming
- Nutrient management planning: more than calculating application rates
- Effect of biological products on the growth and yield performance of wheat, peas, and canola
- Carbon School

If you could not participate, you can find the videos on our website, YouTube channel, or by scanning the QR code.

We are also looking for feedback for next year's Webinar Series. You can scan the QR code for the short survey. Information collected will be used to determine what presentation topics will be for 2025. A big shoutout to everyone who attended. Till next year!

Take the survey

Watch the series

Where's the Snow?

Submitted by: Matthew Wells, Rural Extension Specialist

Is there any snow on the ground? The warm weather has been welcoming. It wasn't until January we felt any cold weather as it abruptly changed from 6 degrees Celsius to -20 degrees Celsius during the night. The lack of snow, however, is concerning. The idea of no snow is a mind-boggling prospect. Thinking back to my childhood, I remember the massive snowbanks in the tree rows, allowing my brothers and me to create interconnecting tunnels beneath the snow drifts. One year, my dad was out plowing snow almost every day so that we could leave the yard to play hockey. That same year, the snow pile in front of our house was taller than the roof! Mind you, this was back in Saskatchewan, where the luxury of Chinook winds whipping across the landscape is non-existent. However, even during my time at College and University, it was guaranteed at least two days of classes would be canceled due to poor road conditions because of heavy snowfall. The very last snow event I remember occurring was back in 2014. I was supposed to write my biology test at the University of Lethbridge in the morning. Due to poor road conditions, the teacher postponed the test to the following day. I had no complaints as it gave me another day to study. Perhaps there is a snow event I am missing, but I find it difficult to remember (old age is not a contributing factor!)

In reminiscing, one cannot argue with the changes in weather occurring in the last ten years. For some, even longer. Climate change continues to be a hot topic as we see extreme weather conditions happening across the globe. Growing up, I loved it when rain came down during the summer months. A slow, steady drizzle over 2-4 days always brought forth a trip to the city to watch a movie at the theatre or a visit with family or friends. By the time I turned fifteen, the long stretches of rainy days were replaced by the hard torrential rain accumulating an inch in two hours. Within two days, we would be back in the field as all that moisture magically disappeared under the scorching heat. The older I get, the more extreme weather conditions I witness. Did we not just have several tornado touchdowns around Iron Springs to Enchant last summer? It is hard to dispute that weather patterns are changing across the country. It certainly makes farming more challenging as producers navigate this ever-changing factor.

Challenges Farmers Face

In this area, two problems have persisted over the last three years, which farmers have had to deal with. It should come as no surprise when I say soil erosion and drought. Ensure not to confuse the impact of drought in triggering soil erosion incidents. Due to a lack of snow cover during February and March over the past couple of years, there have been

Photo by Mike O'Donnell

occurrences of landblowing that have resulted in farmers needing to act to protect their fields. No farmer wants to see their land blown away. The loss of topsoil can be devastating to the land as seed germination occurs in this uppermost layer. The loss of topsoil leads to reduced yields and is not easily replenished through the combination of various farming practices. Even with manure amendments, no-till farming, cover cropping, and composting, it can take years to rebuild an inch of soil. Our area is unique with the combination of irrigation and high clay content in soils, in that we see a variety of specialty crops grown that include beans, potatoes, sugar beets, chickpeas, and more. The challenge is that some of these crops require the working of the land to harvest. With higher clay content in the soils, tilling of the land occurs to break up the soil as clay more readily compacts, leading to poor water infiltration and seed germination. Before the last three years, soil erosion events were less frequent as we had snow cover and moisture throughout the year.

As drought persists, it creates a trickle-down effect that brings forth other dilemmas for farmers. It's no coincidence that the past two years have shown added pressure from insects. In particular, grasshoppers. Timely rain can keep the populations in check, but in the last two years, the weather has not cooperated. Instead, the conditions have allowed grasshoppers and other insects to thrive and, in some cases, exceed acceptable thresholds. This summer, my dad lost half a quarter-section of canola due to high thresholds of grasshoppers. This creates added stress for farmers.

One of the most obvious challenges regarding drought is crop production. There's no point in sugarcoating it: certain crops have not been meeting expectations for farmers. For canola, the lowest I heard was 6 bushels an acre. At that point, is it even worth harvesting? I know for insurance purposes you do, but for a farmer, it's a difficult pill to swallow. I remember harvesting lentils on a quarter section with my dad back in 2014 that went 3 bushels an acre. We didn't even fill the tandem.

I am of course, not an expert on weather or

climate, however, there has been a lot of research in recent years on the subject, and sometimes all that information can feel overwhelming. In the agriculture industry, there are so many factors that can affect the success of or challenges in a growing season, and the weather is certainly one of them.

Resilience of Farmers

Growing up on the farm and being involved in the industry, one thing I can say is that farmers are resilient. Research is always several steps behind when it comes to innovation and adaptation. Farmers are ahead of the curve when it comes to incorporating best management practices and continue to be innovative in the face of climate challenges. In starting our new Rural Living & Ag Extension video series, I've been fortunate to witness first-hand many techniques being utilized in today's farming industry to mitigate soil erosion and moisture loss. For example, many producers that harvest specialty crops such as beans or potatoes are seeding cover crops immediately after the field is harvested to have the bare ground covered for the winter. Potato producers are using the ripper to create mounds in the fall instead of the spring so that they can seed a cover crop that protects the soil for the winter. During the spring, once the potatoes have been seeded, they'll go back to till ridges between the rows to stop water erosion from occurring. Sugar beet producers, after harvesting, will till the land and incorporate manure into the soil. They till the land to bring up large lumps and incorporate manure to bind the soil particles together to prevent wind and water erosion. Grain producers are utilizing stripper headers to leave as much material as possible in the fall to catch snow and build the moisture content for spring seeding.

It's clear that farmers care about the land and will use innovative methods to promote healthy yields and a sustainable future. I am confident that farmers will rise to meet any challenges ahead on and pivot when needed to continue providing the world with high-quality, sustainably-produced food.

Resources Available

There are various resources available and funding for farmers to combat the effects of extreme weather events, like droughts and flooding.

- The On-Farm Climate Action Fund (OFCAF) is a great funding source to help farmers adopt and implement beneficial management practices (BMPs) that support production efficiency and reduce greenhouse gas emissions.
- The Sustainable Agriculture Partnership Program (SCAP) is another well-known source for farmers. Be sure to check out the new Resilient Agricultural Landscape Program (RALP) as it pertains to pasture management, cropland conversion, tree establishment, wetland restoration, and construction of new wetlands.
- Ducks Unlimited also has various programs available for producers, including the winter cereal incentive, grow more forage, and marginal areas programs.
- The Agricultural Clean Technology Program – Adoption Stream supports the purchase and installation of commercially available clean technology or equipment upgrades that aim to reduce greenhouse gas, fertilizer, and methane emissions.

If none of these specifically apply to you, but you are still interested in learning about other possible funding sources, use the AgPal Program and Service Finder, where you can find relevant agriculture resources, programs, research, and more.

OFCAF *SCAP* *DucksUnl* *Clean Technology Program* *AgPal*