

Vol. 03 2026



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Practical Agriculture for Living Landscapes

Three Years of Spring-Seeded
Winter Cereals: What Have We
Learned So Far?

Beyond the Fence Line:
Rethinking Where We
Winter Cattle

Don't Guess, Test: Why Feed
Testing Matters





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Stay Rooted.

Good ideas don't grow in isolation. Stay connected with LARA for field updates, upcoming events, and practical insight from across the Lakeland.

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GROWING THROUGH THE SEASON

Highlights, milestones and stories from summer

Ranch Tour with Kelly Sidoryk

On July 7, as part of the Regenerative Alberta Living Lab, producers gathered at Kelly Sidoryk's ranch for a day of learning, conversation, and seeing adaptive ranch management in action.

Kelly shared how flexibility has become one of the most valuable tools on her operation. Whether it's changing weather, shifting markets, or evolving management practices- success comes from paying attention, learning from experience, and being willing to pivot when conditions change.

One takeaway that resonated throughout the day was Kelly's view of setbacks. Rather than seeing them as failures, she views them as valuable information. Another opportunity to make better decisions and build a stronger, more resilient operation.



Producers also got a behind-the-scenes look at how Kelly strategically manages her cattle herds to improve both livestock performance and pasture health. The tour showcased how thoughtful grazing management and a willingness to adapt can benefit the land while supporting long-term productivity.



St. Paul Field Tour

Every growing season tells a different story, and this year's St. Paul Field Tour gave producers the chance to see that story unfold firsthand.

On July 22, producers and guest speakers Jagroop Gill-Kahlon and Brian Kennedy walked the research plots, compared notes, and discussed the challenges and opportunities shaping this year's crops.

The season has been anything but ordinary. Record moisture left its mark, with peas in low-lying areas falling victim to flooded conditions. Barley, planted on higher ground, avoided standing water but still showed signs of stress from the wet spring and early summer.

The faba beans were looking healthy, although a little shorter than expected. Oats, wheat, and triticale were also behind their usual growth stages but were showing encouraging potential.

Beyond the crop observations, the day was filled with practical insights, great conversations, and the opportunity to learn directly in the field. From discussing this year's growing conditions to sharing management strategies and trial results, the tour was a reminder that some of the best learning happens with your boots on the ground.



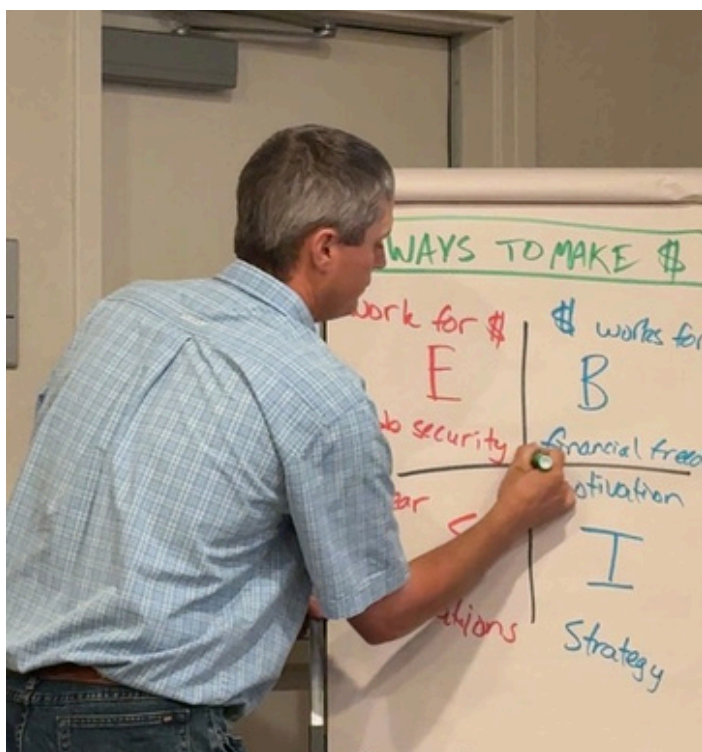
Ranching For Profit

Summer is a busy time in agriculture. Between haying, grazing, crops and all the challenges of this year's rainy weather- finding time to step away from the operation isn't always easy.

But on July 28 & 29 producers from across the province found the time to focus on something that can be just as important as what's happening in the pasture: working on the business behind the ranch.

Our Ranching for Profit workshop brought producers together for two days of practical learning, thoughtful conversations and plenty of ideas to take home and put into practice.

Leading the workshop was Jordan Steele from Ranching for Profit, who challenged participants to look at their operations through a different lens. From decision-making and financial management to setting priorities and building a stronger business, the workshop focused on practical strategies producers can use both in the office and out on the land.



But the learning didn't stop in the classroom.

Producers also had the opportunity to tour River Ranch, where Adam Charbonneau opened the gates to his operation and shared his experience, approach and insights. A key focus was his strong passion for perennial forage grazing systems, and how he has worked to build resilience and productivity through well-managed perennial forage fields. Adam spoke about the long-term benefits he has seen from prioritizing perennial forages- improving soil health, supporting livestock performance, and creating a more stable grazing system over time.



The tour gave the opportunity to see some of the concepts discussed during the workshop in the context of a working ranch, and sparked conversations about what different strategies can look like from one operation to the next, especially when it comes to integrating and managing perennial forage as a core part of the grazing plan.



A huge thank you to everyone who attended, asked questions and shared their experiences. And thank you to our sponsors, the County of St. Paul, M.D. of Bonnyville, Covers & Co., Caouette & Sons, CFGA and Alberta Beef Producers, for helping make this valuable learning opportunity possible.



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Fort Kent Field Tour

There's nothing quite like starting the morning with a cup of coffee, a walk through the research plots, and a little agricultural detective work.

Producers joined us at the Fort Kent Research Farm August 11 for a behind-the-scenes look at what LARA has been growing this season. We toured the greenhouse, walked the plots, and got up close with trials covering everything from allelopathy and fertilizer management to copper enrichment, underseeded clover and our regional varieties: wheat, barley, oat, winter wheat and triticale.

And, of course, there was one topic that was impossible to ignore: rain.

After a record-breaking wet season, participants got to see firsthand how all that moisture has affected crops, field conditions, and our research. Sometimes Mother Nature has a way of adding an unexpected twist to the experiment!

The morning was filled with questions, conversations, observations, and plenty of "well, that's interesting" moments. It was a great reminder that research doesn't always go exactly as planned- and that's where some of the most valuable lessons can come from.

A huge thank you to everyone who joined us. We appreciate you spending your morning walking the plots, talking research, and learning alongside us.

Because when it comes to agricultural research, there's nothing quite like seeing it growing right in front of you





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BUILDING RESILIENCE FROM THE GROUND UP

Healthy soils and thoughtful grazing management can help farms weather whatever the Prairie throws their way.



BY MARA NEEDHAM *Marketing & Communications Coordinator
Lakeland Agricultural Research Association*

Weather in the Lakeland region has been especially extreme in recent years. After several years of drought, this year brought record rainfall, almost double the historical average in many areas, putting significant pressure on pastures and forage. While producers can't control the weather, they can influence how well their land responds.

That starts from the ground up.

Blaine Hjertaas, a professional certified educator with Holistic Management International, says building soil organic matter and improving soil structure are key pieces of creating more resilient farms.

"I believe the weather is only going to get wackier. The only defence we have as farmers is to get organic matter into our soils." - Blaine Hjertaas

Healthy soils contain more organic matter, which helps bind soil particles into stable aggregates. These aggregates create pores that allow water to infiltrate during heavy rainfall while helping store moisture during dry periods.

For Hjertaas, building those aggregates is the foundation.

"It doesn't matter what kind of farm we are. The name of the game is how do we build aggregates?"

Soil is alive

Hjertaas emphasizes that soil is a living ecosystem where plants, microbes, water and nutrients interact.

"It's a continual process. Soil is alive," he says. "The plants and the microbes are continually talking."

Producers can encourage that process through photosynthesis, the water cycle, the mineral cycle and community dynamics.

"The secret is to capture more sunshine," Hjertaas says.



Increasing organic matter through healthy plant growth, living roots and biological activity can help soils absorb and retain more water.

Michael Thiele, a partner with Understanding Ag, agrees that healthier soils can translate into greater farm resilience.

"The higher your organic matter, the more resilient your farm is."



Grazing without taking too much

For livestock producers, grazing management is another important tool. One of Hjertaas' biggest priorities is preventing overgrazing.

"Overgrazing has nothing to do with numbers. It's how long the cattle are there."

Hjertaas recommends keeping grazing periods short, ideally no more than about five days, and allowing plants sufficient time to recover before livestock return.

When plants are grazed again before rebuilding their reserves, they must redirect energy toward replacing leaves rather than supporting roots and soil biology. Over time, repeated overgrazing can weaken desirable forage species.

Instead, producers should focus on adequate recovery. The timing varies with growing conditions, but the goal is to allow plants to rebuild their reserves and reach physiological maturity.

More hooves, less time

Hjertaas also recommends increasing stock density while reducing the time livestock spend in an area.

Higher stock densities concentrate hoof action, helping trample plant material onto the soil surface while frequent movement reduces repeated grazing of the same plants.

"The hooves are actually more important than the mouths in grazing."

"The key is movement," Hjertaas says. "You've got to have animals moving. If they're not moving, it's not working."

Increasing the number of paddocks can make that movement easier.

Making every acre count

Temporary electric fencing can divide larger fields into smaller grazing areas, giving producers greater control over where and when livestock graze.

This strip grazing approach can reduce trampling losses and improve forage utilization. Research from the University of Nebraska-Lincoln has shown that controlled access to smaller grazing areas can increase the proportion of forage livestock consume compared with grazing entire fields.

A 2024 study published in *Translational Animal Science* similarly found that strip grazing increased carrying capacity and beef production per hectare, although individual animal gains varied with forage quality.

The takeaway: thoughtful grazing management can help producers make better use of the forage they already have.

Stay flexible

There is no one-size-fits-all grazing plan. Hjertaas encourages producers to adapt as weather, forage growth and plant recovery change.

“You want to be adaptive. You don’t want to get into the habit of always making the paddock the same size, the same shape.”

That means watching the entire plant community and adjusting management to protect species that need more recovery.

“That’s how we learn: to fail.”

Seeing the difference

Hjertaas saw the benefits firsthand during heavy rains in 2014, when neighbouring farms had runoff while water on his own land infiltrated into the soil.

“I couldn’t find any moving water on my farm. It was all being used.”

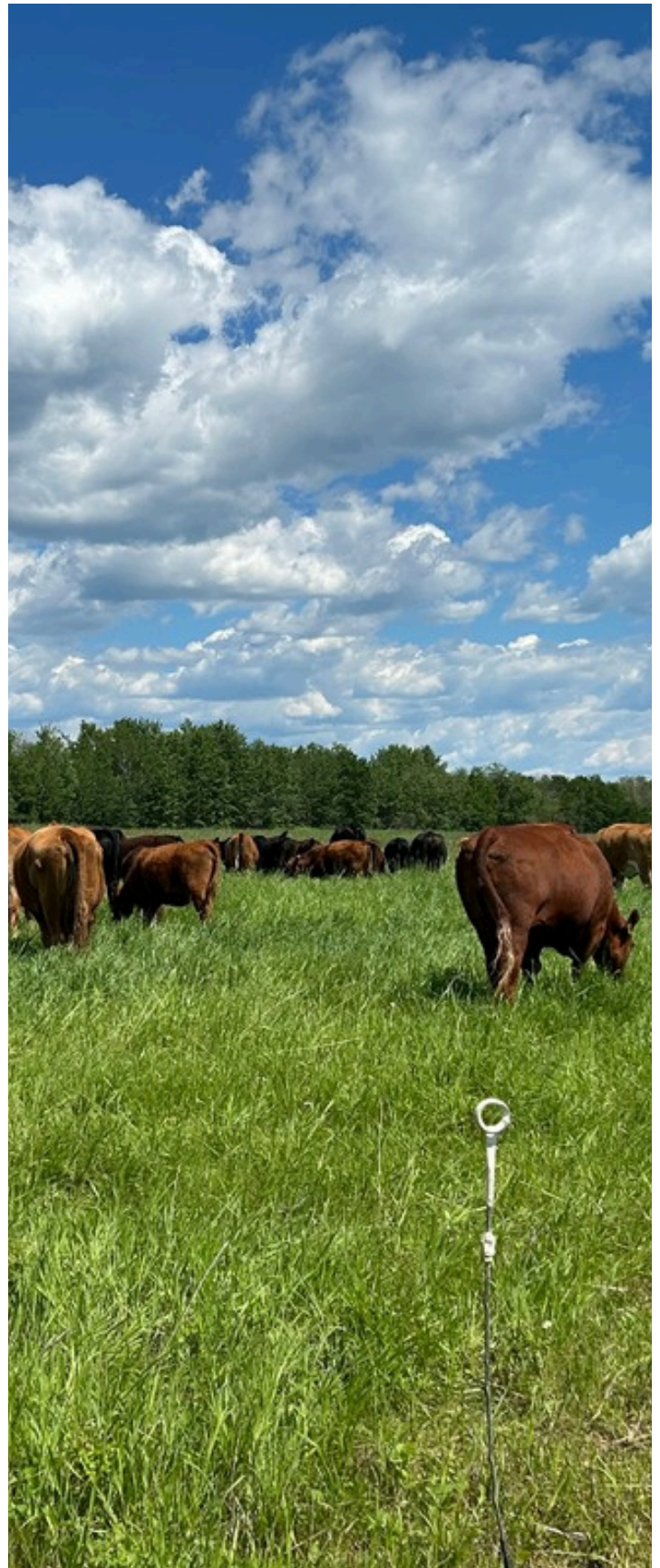
Resilient farms are built through observation, adaptation and a willingness to change course.

“You plan, then you replan if the first plan doesn’t work out.”

Building soil health takes time, but the payoff goes beyond getting through the next drought or heavy rainfall. It is about creating land that can continue producing, supporting families and improving over the long term.

“If you can, at the end of your farming career, say you made a good living, you raised your family and you made the land better, that’s a really good thing.”

Source: “Soil health, grazing management arms farms against severe weather risk: speaker” by Miranda Leybourne, Glacier FarmMedia



DON'T GUESS, TEST: WHY FEED TESTING MATTERS



BY ALYSSA KRAWCHUK *Executive Director*
Lakeland Agricultural Research Association



A mix of weather extremes have created many challenges and opportunities for cattle producers across the region this summer. In particular, record rainfall has led to high moisture levels - filling dugouts and flooding pastures. Although we are seeing phenomenal forage growth and plentiful grazing opportunities, it has made cutting and baling dry hay for winter feed challenging. Not only is the forage thicker than average, the high moisture levels in the ground, coupled with high humidity and frequent rains, means drying swathed hay crops is posing the biggest problem.

With the optimal moisture content of a large round bale being 15% or lower, there is an increased risk of mold development and heating when baled at higher moisture contents (above 18%). Mold development leads to decreased nutritional quality of the feed and increases the potential for mycotoxin production. The increased microbial activity in hay baled at high moisture levels can cause rapid heating and lead to an increased risk of spontaneous combustion.

Even though a bale of hay may look green on the outside, a visual assessment is not accurate enough to ensure proper nutrition.

With the wide variations in feed quality we will likely see this year, it is even more important to feed test to know exactly what your cattle are consuming. While protein will generally remain unaffected by rainfall on cut hay, a single rain event can lead to leaching of soluble carbohydrates and minerals, and, as the hay sits longer and continues to see moisture, there will be greater yield loss in soluble carbohydrates and overall energy content. Another downside is that palatability will continually decrease as a cut hay stand sits prior to baling.

Feed testing is the least expensive and most effective way of ensuring cattle rations are properly balanced. An accurate feed test will provide exact measurements for energy, protein, fibre and minerals available in a given feed, allowing producers to provide cattle with a balanced ration that meets the cattle's nutritional requirements for optimal production. By knowing the nutritional content of a feed source, you can properly allocate feed based on the nutritional demands of your cattle, which change by production stage. As an example, cattle require more energy and protein at calving and lactation than during early pregnancy. This can help save costs, reduce feed wastage, avoid under or over feeding and avoid unnecessary supplementation. According to the Beef Cattle Research Council (BCRC), a standard 180-day winter feed window can cost up to \$450/cow. With this in mind, feed testing should be considered an essential part of your yearly operations.

Not only can an accurate feed test improve feed allocation and cost efficiency, it can help identify and prevent potential economic and animal health issues before they start. Toxicity due to mycotoxins, nitrates and sulfates can have devastating effects on a cattle herd, with risks increasing under poor hay quality and high moisture conditions.

Once you have your feed test results, utilize a ration balancing program such as CowBytes. The BCRC also has “A Tool for Evaluating Feed Test Results” available on their website at beefresearch.ca/tools/feed-testing-analysis-for-beef-cattle/, which can be highly beneficial for evaluating a single feed source at a time.





FEED TESTING

LARA offers two (2) free feed tests per year to all active producers in the MD of Bonnyville and the County of St. Paul.

- Silage, haylage, greenfeed, hay, grain, pellets, protein supplements.
- Complete forage package including all macro and micro minerals.
- Additional feed tests are \$40/test
- Nitrates is an additional \$10/test
- Toxins or other tests are an additional \$10/test

Hay probes are available at the Seed Cleaning Plant in St. Paul and the LARA office in Fort Kent.

CONTACT US



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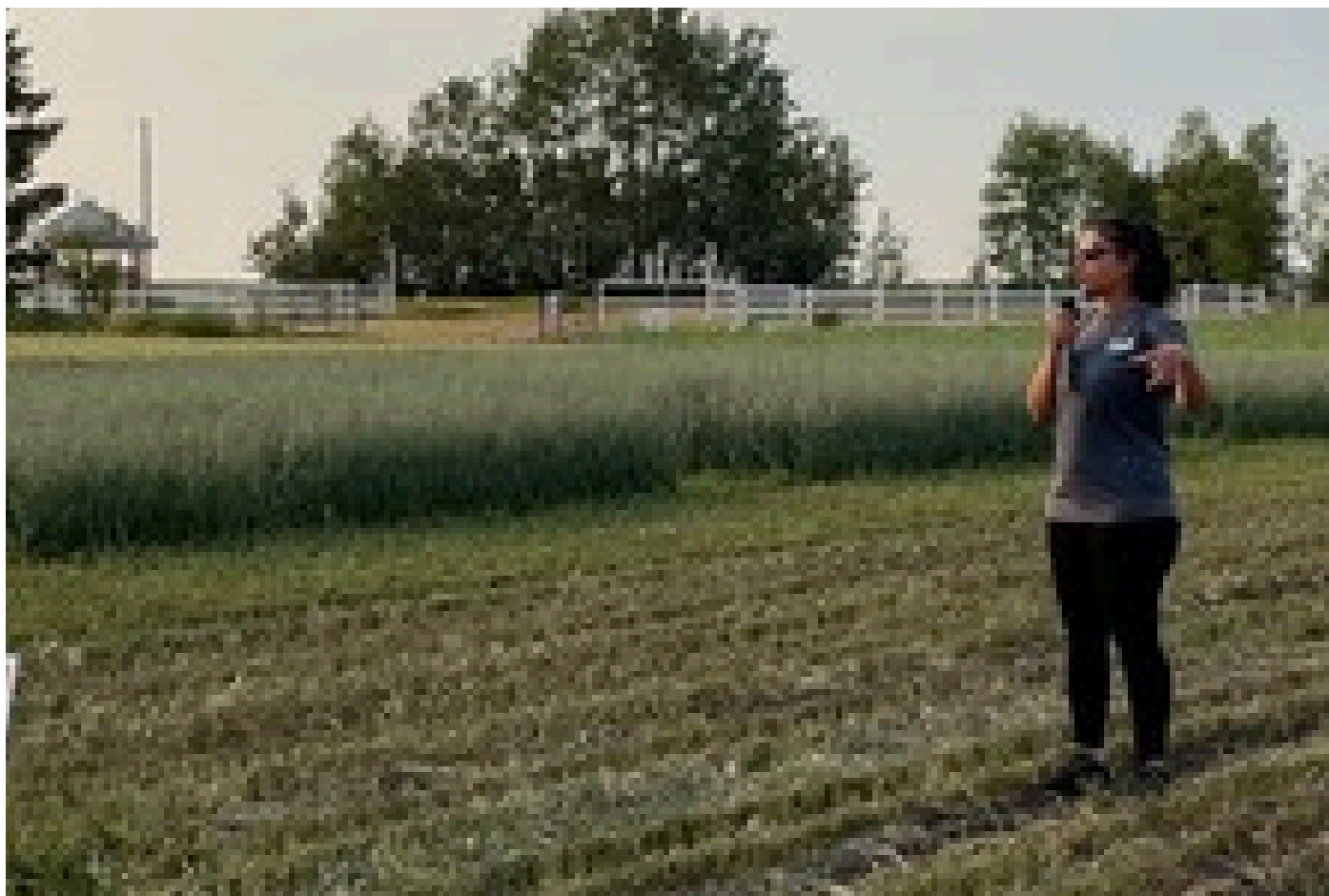
Momna Farzand, Research Agrologist

Whether she's walking research plots, collecting field data, or analyzing results, Momna Farzand is driven by one goal: helping producers make informed decisions through practical research. Since joining LARA in July 2023, she has brought a thoughtful, detail-oriented approach to every project, drawing on more than four years of experience in agricultural research and development.

Momna earned her M.Sc. in Plant Science from the University of Alberta in 2021 and previously worked alongside wheat breeders and plant pathologists to develop and evaluate new wheat breeding lines. Today, as one of LARA's Research Agrologist, she manages and supports small-plot research trials that explore sustainable agronomic practices aimed at improving crop yield and quality across the region.



When she's not in the field, Momna enjoys relaxing with a good comedy movie and spending time with loved ones. This fall, she and her husband are looking forward to an exciting new chapter as they prepare to welcome their first child. As Momna begins her maternity leave, we wish her and her growing family all the best and can't wait to welcome her back to the LARA team.



Keegan Miller, Producer, MD of Bonnyville



For Keegan Miller, agriculture isn't just a career- it's a way of life. A producer in the MD of Bonnyville with eight years of farming experience, Keegan joined LARA two years ago to help bridge the gap between research and on-farm decision-making. He brings a practical, hands-on perspective that helps ensure research stays relevant and useful for real farming operations in the Lakeland region.

One of Keegan's favourite parts of working with LARA is connecting with local producers and exploring innovative ways to help farms become more productive, resilient, and profitable. He has a growing interest in regenerative agriculture and is especially focused on finding practical, real-world solutions that support soil health, improve efficiency, and strengthen long-term farm sustainability.

Next season, Keegan will host LARA's Boosting Fall Forage Production and Grazing Days with Italian Ryegrass in Silage Stubble trial on his farm. The project will evaluate whether relay cropping Italian ryegrass into silage fields can increase fall grazing opportunities without reducing silage yields. The trial reflects Keegan's interest in testing innovative management practices that improve soil cover, nutrient use efficiency, and overall resilience on working farms in a practical, measurable way.

Away from the field, Keegan is a proud dad to six daughters, including a set of twins who are coming up in regenerative ag, so life is never short on excitement. Whether he's trying a new cover crop blend or spending time with his family, Keegan brings enthusiasm, curiosity, and a strong producer-first perspective to everything he does.



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IMPROVING REALTIVE FORAGE QUALITY DURING STUBBLE GRAZING WITH LOW GROWING CLOVERS AS RELAY CROPS



BY LANCE OUELLETTE *Research Agrologist*
Lakeland Agricultural Research Association

Stubble grazing is currently an established practice in central Alberta, which enables livestock producers to make use of alternative forage resources (i.e. cereal crop stubble) (Alberta Agriculture and Forestry 2019) in the fall and prior to winter feeding practices (corn, swath, or bale grazing). Most stubble grazing scenarios involve cattle feeding on a mixture of straw, chaff, grains (left over from combine), and weeds. As such, the quality of the feed can vary considerably. In general, straw and chaff have low amounts of protein, energy, calcium and magnesium. Wheat straw, for example, has 0.40 Mcal/lb of net energy, 3.6% crude protein, 0.19% calcium, and 0.09% phosphorus. The Cowbytes program estimates that a 1300 lbs mature pregnant cow, in her 2nd trimester (mid-gestation), will need: 15.3 lbs/day of TDN, 12.4 Mcal/day of net energy, 1.6 lbs/day of crude protein, 30 g/day of Calcium, and 17 g/day of Phosphorus (Beef Cattle Research Council 2024). Most stubble grazing scenarios occur prior to weaning, where cows still have a high energy and protein requirements as they are still lactating. In a post-weaning scenario, their energy and protein requirements can drop by up to 35%. Thus, there is a need to have access to high quality feed prior to weaning (Alberta Agriculture and Forestry 2019; Yaremcio 2023; Beef Cattle Research Council 2024).

Introducing a relay crop that could be grazed once the cereal crop has been harvested might be a practical solution to this problem. A legume crop would improve relative forage quality for livestock producers and improve potentially mineralizable N for both grain and livestock producers. The relay crop needs be low growing, so as not to interfere with grain combining. It needs to establish during the growing season but not outcompete the cereal crop for resources (soil water and nutrients). It also needs to be easy to terminate in the following spring. Subterranean clover (*Trifolium subterraneum*) is a cool season low growing annual legume, with high palatability, and can tolerate drought conditions well.

White clover (*Trifolium repens*) is another cool season annual legume and is often put in pasture mixes in North America. It has good shade tolerance and can overwinter at mild winters with ample snow cover in Alberta. Different from subterranean clover, white clover can tolerate cool wet conditions (Bergkvist 2003; Kintl et al. 2018; Hill et al. 2021).

This project aims to introduce white clover, subterranean clover as a relay crop in feed barley. The study will consider a few factors that will promote successful outcomes. The first factor will be to investigate the impact of clover species on weed suppression (at both harvest timings). The second factor will be to investigate the impact of clover species on soil available nitrogen to the following crop (at both harvest timings). The study will measure if there are significant interactions between such factors (clover species, soil available nitrogen, and harvest timing). This study is funded for four years (2025-2029), and field trials will be located at three sites in central Alberta: 1) LARA's research station in Ft-Kent (54.310346, -110.617046), 2) Gateway Research Organization research station, and Lakeland College.

Objectives are as follows:

1. Evaluate the impact of feed barley+ clover species (white or subterranean clover) on silage yield and quality.
2. Evaluate the impact of feed barley+ clover species (white or subterranean clover) on grain yield and quality.
3. Determine cereal+clover intercrop combination(s) that will improve forage yield and quality during the stubble grazing period.
4. Produce a reliable estimate of the potentially mineralizable N (nitrogen credit) derived from cereal+clover relay crop systems.
5. Determine which relay crop system (cereal+clover combination(s) and harvest timing) will bring the highest economic return to grain and livestock producers.



Subterranean clover intercropped with feed barley. July 10, 2025



Subterranean clover intercropped with feed barley. Silage harvest.

Results from the 2025 Field Season

Barley silage yields were significantly different by location (Table 1; $p < 0.0001$) (Fig.1). Westlock had the highest silage yields at 3.58-ton DM/ac, followed by Vermillion (1.97-ton DM/ac) and Fort-Kent (1.54-ton DM/ac). The addition of clovers did not significantly increase silage yields ($p = 0.8510$). Silage yield differences were likely due to environmental conditions, where Westlock received more early season rain than Vermillion and Fort-Kent.

Silage feed test results indicated that all tested nutrients were significant by location ($p < 0.05$). Crude protein, potassium, magnesium, and phosphorus content were highest in Fort-Kent. Total digestible nutrients, net energy gain and net energy maintenance were highest in Vermillion. Relative feed value was highest in Vermillion and Westlock.

The addition of clovers did not influence nutrient content in silage. This was likely owing to the drought, but also the staging of the clovers at silage timing.

Barley grain yields were significantly different by location ($p < 0.0001$). Vermillion had the highest grain yields at 94 ± 2.7 bu/ac, followed by Westlock (90 ± 2.7 bu/ac) and Fort-Kent (56 ± 2.7) (Table 2). The addition of clovers did not significantly impact silage yields ($p = 0.1203$) in 2025. On a positive note, despite the drought conditions, clovers did not decrease barley grain yield in 2025. Thousand kernel weights and test weights followed the same trends.

Stubble yield (above-ground biomass) was not significantly different with the addition of clovers ($p = 0.2865$), nor across different locations ($p = 0.0869$). Additionally, whether you removed the biomass during silage, or kept it for grain, it did not influence the total amount of stubble harvested ($p = 0.5598$).

It did, however, influence the quality of that stubble, with the silage plots displaying higher quality stubble in September.

Feed test results from the stubble/regrowth in 2025 demonstrated that the stubble quality improved when the barley was silaged and left to regrow. That was true for crude protein, TDN, NEG, NEM, phosphorus and RFV. However, there was no significant effect on calcium, magnesium, copper, and zinc. This effect may have been heightened because of the early season drought conditions followed by the arrival of late season moisture (mid-August). This likely improved regrowth and stubble quality in August. Under similar conditions, the recommendation would be that it is better to silage the barley crop, and to graze the regrowth+stubble in September. These results were consistent across all three site locations.

Using the web-based tool developed from the BCRC (“A Tool for Evaluating the Economic Value of Feeds Based on Nutrient Content”), we were able to assign an economic value to the stubble. By removing the grain, it improved the value of the stubble by \$10.68/ac

In 2025, apart from calcium, the addition of clovers did not improve stubble quality. Subterranean clover significantly improved calcium content in the stubble ($p < 0.0001$). The effect was most observed in the Vermillion and Ft-Kent locations (western locations). White clover, on the other hand, did not show such promise. This was likely owing to poor emergence during drought conditions. Subterranean clover is better adapted to drought conditions compared to white clover. We hypothesized that clovers would improve crude protein content in the stubble. Our results showed that this was not the case in the 2025 growing season ($p = 0.2498$). Again, this was likely due to persistent drought conditions.

Main Takeaways

- On a drought year, the addition of clovers did not significantly influence silage, grain or stubble yields.
- On the plots that were silaged, the regrowth+stubble was significantly higher quality compared to the grain plots.
- Subterranean clover was able to improve calcium, while white clover was able to improve zinc content in the stubble.
- The recommendation is that on dry years, it is better to silage the crop and graze the stubble thereafter.

Current Observations from 2026 Field Season

- Above average precipitation across all three sites, which have made field operations (seeding and spraying) difficult.
- Barley is particularly stressed with saturated soil conditions. Silage plots are planned to be harvested in mid-August.
- Subterranean clover established well and is thriving.
- White clover has established well, but has produced less above-ground biomass than the subterranean clover.

Completion: Ongoing (2025-2029)



Subterranean clover intercropped with feed barley. August 4, 2026

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Lakeland College – Trial Cooperator in Vermillion
Gateway Research Organisation - Trial Cooperator in Westlock

THREE YEARS OF SPRING-SEEDED WINTER CEREALS: WHAT HAVE WE LEARNED SO FAR?



BY MOMNA FARZAND *Research Agrologist*
Lakeland Agricultural Research Association

Over the past several years, dry conditions across northeastern Alberta have reduced forage production and increased pressure on perennial pastures. Many producers have had to graze stressed stands longer than desired or purchase additional feed, making pasture recovery more challenging in following years.

To help address this issue, the Lakeland Agricultural Research Association (LARA) began a three-year project in 2024 to evaluate whether winter cereals seeded in the spring could provide an additional forage source while reducing pressure on perennial pastures.

Unlike winter cereals seeded in the fall for grain production or early spring grazing, this project evaluated spring-seeded winter cereals grown specifically for forage production.

Winter wheat, winter triticale, and fall rye were seeded at two spring timings: an early spring seeding when soil temperatures were between 2 and 6°C, and a later spring seeding once soil temperatures reached approximately 10–12°C.

The goal was to determine whether early seeding could take advantage of spring moisture, improve establishment, and provide additional grazing opportunities throughout the growing season.

To simulate rotational grazing, plots were harvested whenever forage reached approximately 12 inches in height and then allowed to regrow before the next harvest. This allowed the project to evaluate not only total forage production, but also regrowth potential and grazing flexibility.

The three years of the project showed that moisture conditions after seeding were one of the biggest factors influencing crop performance.

In 2024, early spring seeding performed well under favourable moisture conditions. The highest-yielding variety in the early-seeded treatment was AAC Coldfront winter wheat, producing 2.26 tonnes per acre from two cuts. However, some varieties demonstrated stronger regrowth potential. AB Provider, AB Bronco, and Tadeus winter triticale produced similar seasonal yields (1.77, 1.76, and 1.73 tonnes per acre, respectively) while continuing to produce over three cuts, highlighting their ability to provide repeated forage opportunities.

In the later spring-seeded treatment, AB Bronco winter triticale produced the highest yield at 1.57 tonnes per acre from two cuts, with strong regrowth contributing to overall forage production.



July 25, 2024

The 2025 growing season provided a different outcome. The early-seeded treatment was planted on April 23, but rainfall did not occur until almost three weeks later. The later-seeded treatment was planted on May 8 and received rainfall shortly after planting, resulting in stronger establishment and greater biomass production.

In the early-seeded treatment, Tadeus winter triticale produced the highest winter cereal yield at 1.14 tonnes per acre across four cuts, demonstrating strong regrowth potential. In comparison, AB Bronco winter triticale produced the highest yield in the later-seeded treatment at 2.00 tonnes per acre from two cuts, while Tadeus produced 1.97 tonnes per acre across three cuts.

These results demonstrate that more cuts do not always mean more total forage. Some varieties produce large amounts of forage in fewer harvests, while others provide more consistent production throughout the growing season. For grazing systems, both characteristics can be valuable depending on the producer's management goals.

The 2026 growing season has provided very different conditions, with good moisture availability throughout establishment and early growth. Early spring seeding occurred on May 6, while later spring seeding occurred on May 24.

So far, there appears to be little difference in forage production between the two seeding dates. The favourable moisture conditions have allowed both treatments to establish well, again demonstrating the importance of moisture during early crop development.

What Does This Mean for Producers?

After three years of evaluation, several important lessons have emerged:

- Early-spring seeding can provide grazing flexibility, but success also depends on post-planting moisture conditions.
- Total yield and number of grazing opportunities are not always the same. A variety that produces more regrowth may provide greater value in a grazing system, even if it is not the highest-yielding variety.
- Variety selection should match the management goal. Producers looking for maximum forage production may favour varieties with strong biomass production, while those looking to extend grazing may benefit from varieties with stronger regrowth potential.
-

Across the project, AB Bronco and Tadeus winter triticale have consistently performed well, showing a combination of good forage production and grazing potential.

Spring-seeded winter cereals will not replace perennial pastures, but they can provide another tool for managing forage shortages. By extending grazing opportunities and reducing pressure on stressed pastures, these crops can help producers build more flexibility and resilience into their forage systems.

Note: For detailed results from the 2024 and 2025 trials, please see the LARA annual reports available on the LARA website. Stay tuned for the final results from the 2026 growing season.

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BEYOND THE FENCE LINE: RETHINKING WHERE WE WINTER CATTLE



BY KRISTY TETREAU *Environment & Education Coordinator
Lakeland Agricultural Research Association*

There is something familiar about a straight line on the Alberta landscape. Much of Western Canada was divided through the Dominion Land Survey into a grid of townships, sections and quarter sections, and that grid still shapes our roads, property boundaries, fields and fences. Agriculture didn't create the grid, but we learned to farm within it.

There are good reasons for that. Straight fences are practical, and rectangular fields work well with equipment. When choosing where cattle will spend the winter, practicality and economics still matter — we need reliable access to feed, water and shelter, along with a site we can reach when the temperature drops and the snow piles up. Every tractor hour, litre of fuel and hour of labour has a cost, as do depreciation, repairs, bedding and manure handling.

However, beneath our grid is a landscape that was never square. Water follows gravity, not property lines. It moves across slopes, settles into depressions and follows swales toward wetlands, creeks and dugouts. Snow drifts according to wind and topography, soils change across a quarter section, and cattle redistribute nutrients wherever they feed, drink and rest.

Perhaps choosing a wintering site isn't simply about finding the most convenient place for the cows. It is an opportunity to look at the farm as a whole system — one that has to work for the cattle, the farmer, the land, the water and the bottom line.

Permaculture design sometimes uses a simple exercise called Needs and Yields. For each part of a system, we ask what it requires and what it produces, then look for opportunities for the yield of one part of the farm to meet the needs of another.

Start with the cow. She needs forage that meets her energy and protein requirements, along with minerals, clean water, shelter and a suitable place to rest. Those requirements change with age, stage of production, body condition and weather.

There is also a biological system at work inside the cow that we can't see. In the rumen, a diverse community of microorganisms ferments fibrous plant material, producing volatile fatty acids that provide much of the animal's energy. Microbial protein also contributes to the animal's nutrition. In a very real sense, when we feed a cow, we are feeding a microbial community too. Follow those nutrients through the animal and some return to the landscape as manure and urine.



Around a feeding site, uneaten and trampled forage adds additional organic material. Beneath the cow's feet is another complex biological community, where soil bacteria, fungi and other organisms decompose organic materials and cycle nutrients through the soil-plant system.

The rumen and soil microbial communities are different, but the connection between the two gives us a useful way of looking at the farm: Soil grows forage. Rumen microbes help cattle use that forage. Cattle return nutrients and organic material. Soil organisms cycle those materials, supporting future plant growth.

The important question is where we want that cycle to occur.

Manure, urine and residual feed can be valuable resources on a pasture that would benefit from additional fertility and organic matter. Concentrate those same materials in a drainage pathway leading toward a dugout and they can become a liability. Nutrients carried in runoff can affect surface-water quality and contribute to excessive aquatic plant and algal growth.

There is an important feedback within the farm system: cattle need good-quality water, while our management decisions can influence the quality of the water available to them.

A resource isn't automatically a resource everywhere. Location matters. And so does cost.

At LARA's recent Ranching for Profit workshop, we were challenged to look at a ranch not only as a production system, but as a business. Ranching for Profit's Profit Tree identifies reducing overhead, improving gross margin per unit and increasing turnover as the three basic avenues for improving profitability. That provides an interesting lens through which to look at winter feeding.

Consider a conventional confined winter feeding site and bale grazing. Neither is inherently the better choice; they simply arrange labour, equipment, cattle and nutrients differently.

A confined site offers control and convenience. Cattle may be close to established water, shelter and handling facilities. Feeding, observation and treatment can be

straightforward. Manure is concentrated, allowing it to be collected and deliberately applied where nutrients are needed. Those benefits have value.

They also have costs. Feed comes to the cattle. Bedding may come in, and manure may eventually go back out. Each trip represents machinery, fuel, labour, depreciation, repairs and maintenance.

Bale grazing changes where some of that work happens. Bales can be positioned in the fall while field conditions are favourable, and cattle can be given controlled access through the winter using temporary electric fencing or virtual fencing. Rather than collecting and hauling manure back onto the land, cattle distribute it themselves.

That doesn't make bale grazing free. There are fencing and water requirements, potential feed losses, infrastructure costs and management considerations. Cattle still need to be checked, and moving fence through deep snow is still labour.

The useful question isn't simply which system uses less hay. It is:

What does the whole system cost?



Labour, fuel, tractor hours, depreciation, repairs, bedding, manure handling, fencing, water infrastructure and the producer's time all belong in the calculation. Convenience has value as well. The lowest-input system on paper isn't necessarily the system that fits a particular farm or the people operating it.

Regardless of the economics, a wintering system that saves money but doesn't maintain cattle condition isn't economical.

Feed still has to meet the nutritional requirements of the animals being wintered. Mature cows, growing heifers and lactating animals don't have identical needs, and cold weather increases maintenance requirements. Forage testing, ration balancing, mineral supplementation and body-condition monitoring remain important whether the bale is beside the corral or out on pasture.

The same thinking applies to water.

We often focus on whether cattle have access to enough water, but quantity and quality go together. Poor-quality water can reduce consumption and performance and, depending on the contaminant and concentration, contribute to animal-health concerns. A dependable winter supply isn't much of an advantage if its quality limits its usefulness to the herd. At the same time, water connects cattle management to the larger landscape.

Cattle congregate around water, feed, mineral, shelter and comfortable resting areas. Where those resources are located influences where animals spend their time and where manure and nutrients accumulate. Those decisions can ultimately influence what runoff encounters on its way toward a dugout, wetland or creek.

Feed, water, mineral and shelter aren't simply cattle requirements. Their placement can also be used to influence cattle distribution.



Imagine looking at an aerial photograph of a quarter section. Start with the property boundaries and existing fences. Then add the contours. Mark the dugouts and wetlands. Trace the shallow depressions and drainage pathways.

After an exceptionally wet growing season across much of our region, we may not have to imagine where the water goes. This year has given us an opportunity to see it. Think back over the summer. Where did water pool after heavy rainfall? Which low areas stayed wet long after the surrounding ground dried? Where did normally separate depressions begin to connect? Which areas couldn't be accessed with equipment? Where did water move toward a dugout, wetland or creek?

Those observations can be valuable when planning where cattle will spend the coming winter.

The Government of Alberta recommends considering runoff, soils, topography and proximity to water when choosing seasonal feeding and bedding sites. Winter feeding concentrates manure, urine and residual feed. The nutrients they contain can be valuable when they remain where growing plants can use them. When those nutrients are concentrated in areas connected to surface water, however, runoff can carry some of that investment away.

A wintering site that looks perfectly reasonable when the ground is frozen and covered with snow may tell a very different story when the water begins to move.

This doesn't mean abandoning straight fences or trying to make every pasture boundary follow a contour. Permanent infrastructure still needs to be practical.

Infrastructure can be straight. Management doesn't have to be.

Temporary electric fencing, virtual fencing, bale placement, water and mineral locations can all change how cattle use the landscape without requiring us to rebuild the farm. Areas that would benefit from additional nutrients can potentially be targeted, while saturated areas and direct drainage pathways to surface water can be avoided.

The grid tells us where we can manage. This year's water may have shown us how.



Photo credit: Pembina Valley Online

There isn't one right way to winter cattle. A confined site may make the most sense on one operation. Bale grazing may reduce machinery use and strategically redistribute nutrients on another. For many farms, the answer may be some combination that changes with cattle class, weather, available land and the individual operation.

The goal isn't to replace one box with another. It is to look at the farm as a connected system.

The survey grid tells us where the property lines are. The cattle tell us what they need. The economics tell us what the business can support. Soil biology shows us how nutrients cycle, while topography and water movement connect our management decisions to surface-water quality.

Choosing a wintering site, then, becomes more than deciding where it is easiest to feed cattle. It means considering what the system needs, what it yields, where those yields will go and what it will cost.

And after a wet year like this one, some of the best information may already be in front of us.

Before the ground freezes and the bales are placed, take another look across the farm.

Where did the water pool? Where did it flow?

And knowing that now, is that still where you want to winter your cattle?

Seven Questions to Ask Before Choosing a Wintering Site

1. Does it meet the cattle's needs?

Will feed quality, water quality and quantity, minerals, shelter and resting conditions support the cattle being wintered?

2. Where will the water come from?

Is the source dependable and suitable for livestock? Is there a backup, and how will its location influence cattle movement?

3. What does it really cost?

Include labour, fuel, equipment, depreciation, repairs, bedding, manure handling, fencing, water infrastructure and your time.

4. Where will the nutrients go?

Can manure, urine and residual feed provide fertility where it's needed, or are they being concentrated where they could become a liability?

5. Where does the water go?

Follow the topography. Where will runoff travel, what will it encounter along the way, and does it connect the wintering site to a dugout, creek or wetland?

6. Does it work for the people?

Consider workload, safety, convenience and quality of life, particularly during the coldest part of winter.



Photo credit: Beef Cattle Research Council

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SEASONAL REFLECTION: FINDING SUCCESS BEYOND THE BOTTOM LINE IN FARMING



BY LESLEY KELLEY *Farmer & Co-Founder*
The Do More Agriculture Foundation

As farmers, it's easy to get caught up in the numbers—yields, expenses, profit margins, and the ever-present bottom line. I understand this fully as I am analyzing those numbers and scenarios everyday. But focusing solely on financial outcomes can make us often overlook the real victories that shape our journey. The truth is, success in agriculture isn't always determined by the final line on the financial report. So much lies beyond our control—weather, input costs, markets—and yet, there are meaningful accomplishments worth celebrating.

With the season winding down, now is the perfect time to reflect on what we've achieved, not just on paper, but in the ways that truly matter too. Farming success is often found in the small moments of resilience, connection, and personal growth. Here are some of the wins we can acknowledge and carry forward into the next season:

1. We Showed Up - Even on the Hard Days

There were days when it would've been easier to stay in bed, to let the overwhelming workload win. But we kept going, one step at a time, because farming demands that we show up—even when conditions are less than ideal.



2. We Asked for Help When Needed

There's a mindset in farming that equates strength with self-sufficiency. But true strength lies in knowing when to ask for help. Whether it was leaning on neighbors, family, farm team or community resources, seeking support allowed us to keep moving forward when the load got heavy.

3. We Made Time for Meaningful Conversations

It's easy to get consumed by tasks and to-do lists, but making space to connect with others—or even reflect inwardly—builds resilience. Whether it was discussing mental health or the day to day struggles, sharing farming stories, or simply listening, these conversations matter just as much as the work we do in the field.

4. We Took Time to Rest

Farming is an endless cycle of planting, growing, tending, and harvesting. But we also recognized that rest is essential. Taking breaks to recharge—whether a few minutes of quiet or a well-earned day off—helped us maintain the stamina needed for the long haul.

5. We Celebrated Small Wins

From repairing equipment just in time to enjoying the first blooms of a healthy crop or seeing a healthy baby calf take those first steps, those small victories kept us going. The to-do list might never end, but each task completed is progress worth celebrating.

6. We Embraced the Joy of Community

No farm stands alone. Whether it's the people working alongside us, the neighbors or team lending a hand, or family members cheering us on, the strength of community is a win in itself. It reminds us that we are never truly alone on this journey.

7. We Practiced Grace with Ourselves

Progress isn't always about productivity. We learned to offer ourselves grace when things didn't go as planned—when weather disrupted planting, yields weren't what we hoped, or equipment gave out. This grace is essential, reminding us that we are more than our outputs.

Looking Ahead

As we prepare for the next season, let's carry forward these victories and lessons. The farm may not always reflect success through numbers, but our efforts, resilience, and connections are every bit as important.

What are you most proud of accomplishing this season? The answer might surprise you. Often, it's not the grand outcomes that define our success, but the quiet, everyday efforts that truly make a difference.

If you or someone you care about is struggling with their mental health and you're not sure what to do, we've got you. Reach out and call the Alberta Mental Health Line at 1-833-827-4230 for advice on how to support them and look after yourself too.





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PERMACULTURE DESIGN



BY KRISTY TETREAU *Environment & Education Coordinator
Lakeland Agricultural Research Association*

A garden exists within a larger landscape. Its success is influenced not only by soil fertility and plant selection, but by topography, water movement, prevailing winds, sun exposure, snow accumulation and the way people use the site. Permaculture design brings these relationships to the forefront, treating the garden as one part of a connected system rather than an isolated growing space.

The design process begins with observation. Where does water collect after heavy rainfall? Which areas dry first in spring? Where does snow accumulate? How does sunlight move across the property? Where are the prevailing winds coming from? Observing these patterns through different seasons can help determine where elements belong and where existing landscape processes can do some of the work for us.

LARA's no-till demonstration garden has provided an excellent example. After several dry growing seasons, moisture conservation was an important consideration. The garden's lower position on the landscape allowed it to retain moisture longer than surrounding areas — a significant advantage during drought.



LARA no-till garden 2026

Then came 2026.

High rainfall and saturated conditions caused water to accumulate in the same low-lying area. A characteristic that had helped the garden through dry years became a limitation in a wet one.

From a permaculture perspective, that does not necessarily mean the original decision was wrong. The landscape has simply provided another layer of information. Both drought and flood have now shown us how water behaves on this site, giving us an opportunity to adapt the design.

The answer may not be to drain the water away or move the entire garden. Higher growing areas

could provide protection for crops sensitive to saturated soils, while lower areas could support plants better adapted to additional moisture. The objective is to understand the pattern first and then determine how best to work with it.

Two useful tools in permaculture design are zones and sectors. Zones consider how frequently we interact with different parts of a property. Elements requiring regular attention generally belong closest to the places we spend the most time. Herbs harvested daily make sense near the kitchen. A greenhouse requiring frequent watering and monitoring should be easy to reach. Perennial fruit or shelterbelts requiring less frequent attention can be farther away.

Sector analysis looks instead at the forces moving through the property — sun, wind, water, wildlife and even views or noise. A shelterbelt might slow prevailing winds and capture snow. A south-facing wall can create a warmer microclimate. A natural drainage route might provide water to perennial vegetation rather than being treated simply as water that needs to leave the property.

Permaculture then asks us to look at the relationships between these elements.

Every element has needs and yields. A fruit tree needs water, nutrients and sunlight, while providing food, shade, leaf litter, habitat and organic matter. Chickens require food and shelter but can provide eggs, manure and pest control. Compost needs organic material and moisture and returns nutrients to the garden.

Connecting those needs and yields creates efficiency. Fallen leaves become mulch or compost. Compost feeds the fruit trees. Chickens clean up fallen fruit and contribute fertility. Rainwater from a roof can supply nearby gardens. Instead of adding another input each time a need arises, the question becomes: Is something else in the system already producing what is needed?

The dramatic shift from drought to excessive moisture is also a reminder that resilient garden design cannot focus on only one set of conditions.

Healthy soil rich in organic matter can absorb rainfall while retaining moisture for dry periods. Mulch reduces evaporation. Diverse plantings provide different rooting depths and responses to stress. Perennial vegetation maintains

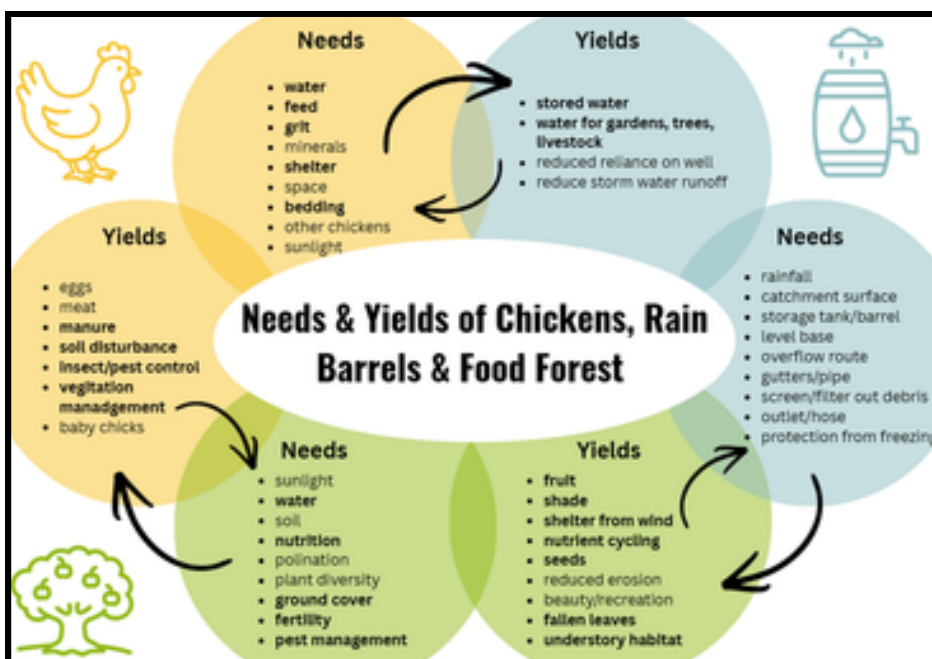


living roots for more of the year. Water storage can provide reserves during drought, while understanding natural drainage helps manage years when water is abundant.

Permaculture is sometimes associated with food forests, swales, herb spirals or companion planting, but these are tools rather than the design itself. **At its core, permaculture is about observation, relationships and working with the patterns already present in the landscape.**

The flooding of LARA's no-till garden gave us information we could not have gained during the dry years alone. The next step is not to erase that pattern, but to learn from it.

Before changing a garden, take time to read the landscape. Notice where water moves, where snow collects, what is already thriving and how you naturally use the space. The landscape is already doing much of the work. Good design begins by understanding how to work with it.



A CHALLENGING YEAR



BY KRISTY TETREAU *Environment & Education Coordinator*
Lakeland Agricultural Research Association

The 2026 growing season looked very different at LARA. With both our no-till and traditionally tilled gardens flooded for much of the season, the greenhouse became the main focus of our horticulture program. The greenhouse itself was not immune to the excessive moisture, but its raised beds provided enough drainage and elevation to prevent a total loss and gave us an opportunity to see what could perform under unusually wet conditions.

Seeds for the greenhouse were generously donated by West Coast Seeds. Considering the conditions, much of what we planted performed remarkably well. One crop in particular generated more questions from visitors than almost anything else we grew: amaranth.

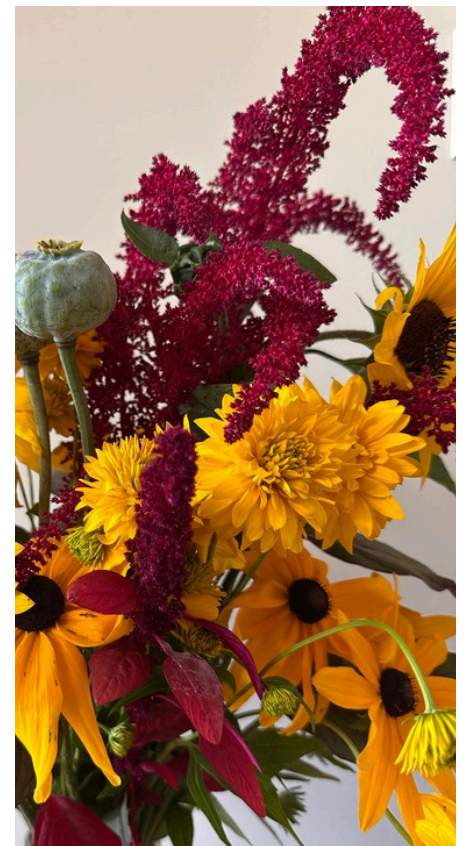


Amaranth may be unfamiliar in many northern Alberta gardens, but it is far from a new crop. Amaranth has a long history of cultivation in the Americas, including as an important grain crop of the Aztecs. Depending on the variety, it can serve several purposes in the garden: the young leaves are edible as a leafy green, the mature plants produce a nutritious, naturally gluten-free grain, and the striking flower heads make an attractive addition to cut-flower arrangements.

We grew Burgundy Grain Amaranth from West Coast Seeds. This variety produces dramatic burgundy flower plumes followed by abundant small, pale seeds. Plants can reach approximately 1.5–2 m (5–6 ft) tall, making them an impressive feature in the greenhouse.

Amaranth can be direct-sown in late spring once the soil has warmed, but with our short growing season we gave it a head start indoors, seeding ours on April 8, 2026.

Amaranth is fairly adaptable. While it prefers well-drained, moderately fertile soils it did do very well in an area of the greenhouse that was often quite water logged. Some of our amaranth experienced lodging, likely due to the combination of the saturated soils and the weight of the mature plants.





The grain is ready to harvest toward the end of the growing season when the flower heads begin to dry and the seeds release readily when rubbed between your fingers. Because individual seeds are very small, timing and handling make harvesting much easier.

Cut the mature seed heads from the plant and place them in a large paper bag, on a tarp or in a clean container. Allow the heads to finish drying in a warm, well-ventilated location. Once completely dry, rub or shake the flower heads to release the seed. The resulting mixture will contain both grain and dried plant material.



Use a fine screen or sieve to separate the larger pieces of chaff, then winnow the remaining material by gently pouring it between containers in front of a light breeze or fan. The lighter chaff blows away while the heavier seed falls into the container. Make sure the cleaned grain is thoroughly dry before storing it in an airtight container.

For a plant that can provide greens, grain and flowers—and still managed to attract attention during one of our most difficult gardening seasons—amaranth proved to be a worthwhile addition to the LARA greenhouse.

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Livestock Water Quality

YOU TEST YOUR FEED. YOU TEST YOUR SOIL.
WHAT ABOUT TESTING YOUR WATER?

**Water is an essential nutrient,
and cattle need regular access to
palatable water of adequate
quality and quantity.**

Water quality can change with drought, runoff, flooding and evaporation. Sometimes increasing levels of total dissolved solids, sulphates, nitrates and other potential concerns. Regular water testing provides a baseline and can help identify water-quality issues that may affect cattle health and performance.



WHEN SHOULD YOU SAMPLE YOUR WATER?

Consider testing when:

- ✓ Livestock begin using a new water source
- ✓ Water levels become unusually low
- ✓ Significant runoff or flooding occur
- ✓ Water colour, clarity or odour change
- ✓ Unexplained performance issues
- ✓ Establishing a baseline of water quality



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Know what's
in your water



Establish a
baseline



Respond to
changing
conditions



Listen. Learn. Grow



 Hosted by Dr. John Campbell



The Beef Cattle Health and Nutrition Podcast

2023-05-18: Water Quality for cattle with Dr. Bart Lardner

In this episode of The Beef Cattle Health and Nutrition Podcast, Dr. Bart Lardner discusses why water should be considered one of the most important nutrients in beef production and how water quality can influence cattle health, intake and performance. The conversation covers common water-quality concerns including sulphates, total dissolved solids and high bacterial counts, as well as how cattle respond to and select different water sources.

A key takeaway is that better-quality, more palatable water can translate into better cattle performance. Lardner's research comparing cattle drinking directly from dugouts with cattle supplied dugout water through off-site watering systems found that simply pumping water to a trough could improve performance, while aeration provided additional benefits.



Regenerative Agriculture Podcast by John Kempf

Episode 263: Dallas Mount - Succession, Debt, People, Investment

In this episode of Ranching Returns, Dallas Mount of Ranching for Profit discusses the business decisions that often determine whether a ranch is truly successful, including succession, debt, managing people and investing. A key message is that being good at producing cattle or crops does not automatically mean a ranch is a profitable business. Decisions about buying land or equipment, expanding the herd or taking on debt should be evaluated by the return they create rather than simply by increased production or assets. Succession planning follows the same principle: successfully bringing another generation into the operation requires more than transferring land—it requires a business profitable enough to support additional people.

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LITTLE DEMON CO. - KILLAM, AB



BY KRISTY TETREAU *Environment & Education Coordinator
Lakeland Agricultural Research Association*



A reliable winter watering system needs to deliver enough water at -30°C without turning every cold snap into a daily maintenance job. After years of chopping ice and experimenting with different setups, Monty Phillips of Little Demon Co. in Killam, Alberta, developed a tire-trough lid designed for the realities of watering livestock through a Canadian winter.

Phillips was first introduced to recycled mining-tire troughs around 2008. He liked the simplicity of the concept, but the particular system he was working with had limited power and was watering approximately 1,400 head.

Once temperatures reached -15°C, ice began forming around the edges. Below -30°C, Phillips recalls chopping as much as 12 inches of ice—and occasionally nearly the entire 300-gallon trough—once or twice a day in four separate troughs.

That experience planted the seed for what would eventually become Little Demon Co.'s winter watering system.

In 2020, Phillips again found himself relying on tire troughs, this time at a property where power wasn't available to the existing livestock waterers. He built his first lid from half-inch belting to reduce wind exposure. It helped, but the horse troughs still needed to be chopped open throughout the winter.

By 2022, he had built his first half-inch High-Density Polyethylene (HDPE) tire-trough lid with four drinking holes and plastic nose sleeves. Like many farm-built innovations, the first version



revealed what needed to change.

The plastic around the drinking openings wasn't strong enough if an animal managed to get a foot into one.

Phillips continued refining the design, and in 2024 Little Demon Co. produced its first manufactured four-hole lid with centre-riser access.

The system pairs a five-foot recycled mining tire with a heavy HDPE lid that significantly reduces the amount of water exposed to cold air and wind while maintaining four drinking locations.

The lid is only one part of Phillips' approach. For new installations, he recommends burying a 24-inch corrugated poly culvert approximately eight to ten feet into the ground, with water and power lines running through it. The design allows heat from the ground to rise beneath the trough and circulate under the lid.

The black rubber tire and HDPE lid also absorb energy from the sun. Where electricity is available, supplemental heat adds another layer of freeze protection.

Phillips reports that his system has continued to provide accessible water at approximately -40°C with blowing snow while using a heater operating intermittently. Snow may pack into the drinking holes, he says, but the water underneath remains accessible.

He is also careful not to promise a completely maintenance-free system. "No water trough is invincible in our -40°C plus the wind Canadian weather."

A Little Demon tire trough holds approximately 300 gallons, with roughly 200 gallons accessible when the lid is installed. Maintaining that volume also keeps the valve submerged beneath the water, helping protect it from freezing.

The trough can be adapted to different water-delivery systems, including top-fed systems, drain-back setups and solar pumps. That flexibility can be particularly useful for remote winter grazing sites where conventional power isn't readily available.

For Phillips, the value of the system comes back to something very familiar to anyone who has spent a January morning thawing a livestock waterer.

After years of fighting frozen water himself, he says he feels a sense of relief when another producer purchases one of his systems because he knows what it can mean: waking up on a bitterly cold morning and having a large volume of water already available for cattle, sheep, horses or bison.

Little Demon Co.'s watering system didn't begin with a product idea. It developed through several Alberta winters, failed prototypes and a desire to spend less time chopping ice.



For producers considering a change before this winter, Phillips' experience also highlights the importance of looking beyond the waterer itself. Water source and quality, herd demand, available power, wind exposure, freeze protection for lines and valves, and a plan for extreme weather all need to work together.

The right winter watering system will look different from one operation to the next. But on a -30°C morning, the goal is the same: clean, accessible water without an axe being part of the daily routine.



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and extension in Alberta,

Our mission is to conduct local,
innovative, unbiased applied
agricultural research and
extension throughout the
Lakeland to promote sustainable
agriculture practices for
producers, stakeholders, and our
rural communities.



Stay Rooted.

**Good ideas don't grow in isolation. Stay connected
with LARA for field updates, upcoming events, and
practical insight from accross the Lakeland.**

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