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Grain, Grass & Growth February 2026

CFSEA Announces \$193,400 Gift from Anchor J Ranches to Chinook Applied Research Association

The Community Foundation of Southeastern Alberta (CFSEA) is pleased to announce a \$193,400 donation from Anchor J Ranches, through the Anchor J Fund, to the Chinook Applied Research Association (CARA) in Oyen, supporting agricultural research, innovation, and sustainability across Southeastern Alberta.



From right to left:
Landon Olsen, CARA Financial Supervisor, Dianne Westerlund, CARA Manager, and Helene Nicholson, CFSEA Regional Development Coordinator.

“We are excited to utilize this generous donation as we endeavour to bring innovative, profitable, and sustainable practices to our agricultural community,” says Dianne Westerlund, CARA Manager. “This grant will enhance our overall program and enable evaluation of new technologies such as virtual fencing at the local level within the Special Areas.” CFSEA’s Regional Development Coordinator says the investment reflects the importance of supporting agriculture as a foundation of rural communities.

“This investment reflects a strong belief in the importance of agriculture to the long-term vitality of our region,” says Helene Nicholson, Regional Development Coordinator with the Community Foundation of Southeastern Alberta. “Through the Anchor J Fund, Anchor J Ranches is helping ensure organizations like CARA have the resources they need to explore new ideas and respond to the evolving needs of rural communities.”

Anchor J Ranches established the Anchor J Fund with CFSEA to support charitable initiatives in Southeastern Alberta, helping to strengthen the region’s agriculture and charitable sector for the long term.

“Anchor J Ranches believes in the power of community and the incredible impact that local organizations can make. This contribution allows us to support meaningful work that strengthens lives and creates lasting change. We’re proud to help enable initiatives that make our region a better place for everyone.”

About CARA

The Chinook Applied Research Association (CARA) is a producer-driven, not-for-profit organization based in Oyen, Alberta, serving the Special Areas and the MD of Acadia. Established in 1979, CARA delivers applied research, demonstration, and extension programs that support innovative, practical agricultural practices tailored to east-central Alberta’s soil and climate conditions. Learn more at <https://chinookappliedresearch.ca/>

About CFSEA

The Community Foundation of Southeastern Alberta (CFSEA) works to build vibrant, healthy, caring communities by connecting donors with local non-profits to create lasting impact—today, tomorrow, forever. Annually, the Community Foundation distributes over \$1.7 million in grants to support philanthropic priorities throughout the region. Since 1992, CFSEA has strengthened Southeastern Alberta through endowment building, grant making, and community partnerships. Learn more at www.cfsea.ca.

For media inquiries, please contact: Emily Conley, Grants and Communications Coordinator; grants@cfsea.ca
403.527.9038

Are you curious about virtual fencing?

We are seeking partners to demonstrate virtual fencing technology. As cattle owner, your commitment will include dedication of a small group of cow/calf pairs (maximum 30 cows) for the June through September grazing season. Solar powered collars will be installed on the cows and one-half of the calves. Training will be provided to establish grazing boundaries and tips for monitoring the cows.



Please call Dianne for more information 403-664-3777 or cara-dw@telus.net.

Don't Throw Your Profits out with the Pasture Water: Proactive water quality monitoring for grazing beef cattle



CARA is partnering with Dr. Susan Markus, Livestock Scientist with Lakeland College, to evaluate tools to monitor water quality right at the dugout during the grazing season. We need five cow/calf groups and monthly access to water sources for each group between May through October. As cattle owner, you would commit to weighing the cows at the beginning and end of the grazing season and then allow our staff to enter your pastures and use the testing devices as well as collect water samples for lab analysis. The lab analysis will verify accuracy of the

monitoring tools. We already have commitment from a few herds, but need more.

Please contact Dianne for more information at 403-664-3777 or cara-dw@telus.net.

Planning for Spring Grazing

By Bailie Barnett. AAg, Agri-Environmental Specialist, Moose Jaw, February 2026

As winter enters its final stretch, the promise of longer days and green pastures is just ahead. While it is tempting to send your herd out to graze as the first blades of grass appear, timing is critical to protect pasture health and long-term resiliency. Taking time to reflect on the past winter can reveal important management considerations before grazing begins.

Winter weather on the prairies can be volatile, and it is not uncommon for conditions to vary week to week. Temperature swings and freeze-thaw cycles can have damaging effects such as disrupting soil structure and breaking plant dormancy. Repeated cycles can lead to frost heaving, where plant crowns and roots are pushed upwards, increasing the risk of winter injury. Recent years have also had less snow cover, leaving plants vulnerable. Most forage species can tolerate temperatures down to -15 C to -20 C, but without snow protection, water inside plant cells can freeze, resulting in tissue damage.

Feeding livestock on pasture during winter comes with added considerations. Heavy, repeated traffic can lead to soil compaction, especially when warmer weather creates muddy or soft conditions. Nutrient overload is another concern, so it's important to adopt wintering strategies that spread nutrients evenly across the field rather than concentrating them in one area.



Cattle grazing forage during winter

Tame and native forage stands respond differently to winter stress. Typically, tame forages are more sensitive to harsh winter conditions but are faster to grow in the spring. Including winter-hardy species like tall wheatgrass and hybrid brome grass in tame stands can help boost resiliency once established. Native forages are generally hardier, being naturally adapted to prairie conditions, but take longer to grow in the spring and still require responsible grazing to maintain resiliency. A good rule of thumb is waiting until the plants are at the three to four leaf stage before turning animals out.

When grazing season begins, one tool for grazing management is to determine carrying capacity and set appropriate stocking rates to prevent overgrazing. If you haven't already, consider adopting a rotational grazing system that allows rest periods and varying timing of grazing to support long term plant health and recovery. Pay close attention to sensitive

areas such as riparian areas for overuse. Use strategic placement of salt and mineral supplements to help move livestock away from these areas or consider an exclusion fence. Since cow nutritional needs spike in spring post-calving, always ensure forage quality and quantity align with their requirements.

In short, successful spring grazing starts long before the first green shoots appear. Understanding how winter conditions impact your pastures and adjusting management accordingly can make the difference between a resilient stand and one that struggles all season. Additionally, producers can access funding through the [Resilient Agricultural Landscapes Programs](#) for projects such as fencing to protect native range and riparian areas.

Using Carbon-to-Nitrogen Ratio in Crop Rotation Planning

Augustine Osei, Crops Extension Specialist, Saskatchewan Weyburn Agriculture Knowledge Centre, December 2025

With harvest wrapped up and planning for next season already underway, many producers are now focusing on crop choices, fertilizer costs, soil health and yield stability. One factor that influences all four of these, but is often overlooked, is the carbon-to-nitrogen (C:N) ratio of crop residues and how it affects nutrient release (mineralization) or tie-up (immobilization). Understanding the C:N ratio is a simple yet powerful way to improve fertilizer efficiency, prevent early-season nitrogen deficiencies and support long-term soil health.

Why the C:N ratio is important

The C:N ratio describes how much carbon (C) relative to nitrogen (N) is present in crop residues. Soil microbes use carbon as an energy source and nitrogen to build their bodies. An ideal, balanced “microbial diet” in soil has a C:N ratio of about 24:1. This means microbes need roughly 24 parts of carbon for every one-part nitrogen to decompose organic residues. At this ratio, residues break down quickly, leaving little to no excess carbon or nitrogen behind.

When residues have a high C:N ratio (high in carbon and low in nitrogen), microbes must pull (immobilize) additional nitrogen from the soil to break them down. This reduces the amount of available nitrogen for the following crop. In contrast, residues with a low C:N ratio decompose more quickly and release nitrogen back into the soil sooner.

In simple terms:

- **High C:N ratio (C:N > 24:1)** = microbes need nitrogen – immobilization – temporary nitrogen shortage for the next crop
- **Low C:N ratio (C:N < 24:1)** = microbes release nitrogen – mineralization – more nitrogen available for the next crop

Typical C:N ratios of some common prairie crop residues

Crop/Residue Type	Approximate C:N Ratio	What This Means
Cereals (wheat, barley, oats)	60:1 – 80:1	High carbon — immobilizes nitrogen — next crop may be short on early nitrogen
Corn residue	60:1	Very high carbon; slow breakdown
Oilseeds (canola, mustard, flax)	30:1 – 45:1	Moderate C/N; breaks down faster
Pulse crops (pea, lentil, soybean)	20:1 – 35:1	Low carbon — releases nitrogen — boosts next crop
Cover crops (legumes)	15:1 – 25:1	Low carbon — releases nitrogen — boosts next crop

Sources: [United States Department of Agriculture's National Resources Conservation Services](#); Gan et al. (2011)

How C:N ratio can influence your rotation

1. Following cereals with cereals? Expect nitrogen tie-up and higher nitrogen demand.

High-carbon residues break down slowly. Microbes will pull available nitrogen from the soil, potentially causing early season nitrogen deficiencies. This may be addressed by increasing starter nitrogen without exceeding the maximum amount that is safe for your seed or by banding an increased amount of your nitrogen at seeding to offset immobilization.

2. Following pulses such as peas or lentils? Expect more available nitrogen.

Pulse crops leave nitrogen-rich residues and fewer total biomass inputs. Their low-carbon residues mineralize quickly, providing improved early-season nitrogen supply for follow-up crops. In some cases, nitrogen rates may be adjusted downward, especially in wet springs where mineralization peaks.

3. Following oilseeds such as canola or flax? Moderate levels of available nitrogen.

Residues from canola and flax break down faster than cereal straw but still immobilize some nitrogen. Expect some immobilization; nitrogen requirements will be similar to wheat-on-wheat systems but more moderate.

Practical Management Tips For Farmers

- Avoid stacking high-carbon residue crops back-to-back to improve residue balance and nitrogen cycling, unless the goal is solely for soil organic carbon buildup.
- Use pulse crops strategically to improve early nitrogen fertility and reduce applied fertilizer.
- Manage high C:N residues such as cereals by chopping straw evenly at harvest or avoiding heavy windrows or mats while maximizing contact between residue and the soil.
- Adjust your nitrogen plan by choosing fertilizer timing based on C:N expectations. For instance, in high C:N residue more starter nitrogen will be needed and should be banded to reduce immobilization, whereas in low C:N residue conservative nitrogen rates may be adequate.
- Use soil testing to confirm your rotation impact.

Impact on rotation planning

Before choosing your rotation, ask:

- What was the C:N ratio of this year's residue?
- Will next year's crop require early nitrogen?
- Should nitrogen rates be adjusted up or down?
- Do I need banded nitrogen to overcome expected immobilization?
- Should a pulse crop be incorporated to correct high C:N residue buildup?

A well-planned rotation mindful of C:N ratio can prevent early-season nitrogen deficiency, increase fertilizer efficiency, improve crop vigor, reduce input costs and build long-term soil health. In a time of rising fertilizer prices and tight margins, understanding C:N ratio is an easy, low-cost way to make better rotational decisions.

FUNDING PROGRAMS

CFGA—OFCAF opened Feb 1st
for rotational grazing & improved pasture projects.

SCAP—Water is open for water projects

Call 403-664-3777 for assistance!





Herd & Her



*Charcuterie Boards,
Drinks &
Conversation
Hope to See You There!*



Join other livestock ladies for an evening of conversation focused on reducing stress at calving time. Discussions will be led by Zoe Gould, DVM and a panel of experienced ranches.

***“Making Good Mamas”
“Who’s Next? Early Signs and
When to Intervene”***

February 24, 2026

5:00 pm - 8pm

New Brigden Hall

\$25/person

Please Register!

Call CARA at 403-664-3777 or email cara-1@telus.net

2025/2026 Board of Directors

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