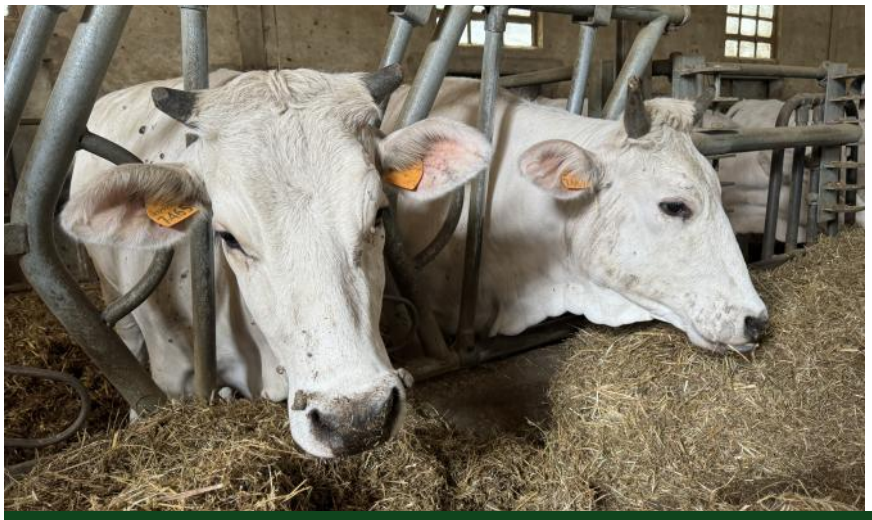

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GRASSROOTS NEWS & VIEWS
May 2025

Coordinator's Note — Kayla Minor

Greetings FFGA Members

I've now been with FFGA for 3 and half years, and it's been a fantastic experience both personally and professionally. I'm thrilled to report that our communications are thriving. Our monthly newsletter, *Grassroots News & Views*, reaches 140 farms and ranches, 65 companies, and 20 municipalities.

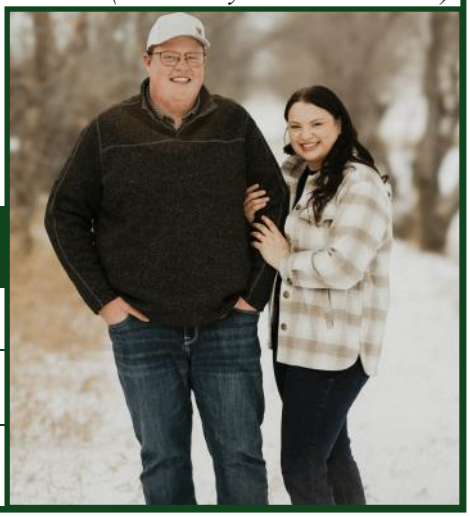
We have a had a good start to 2025 with a series of successful events! I had the opportunity to travel to Italy on the FFGA Ag & Sightseeing Tour in February and March as the tour lead. This trip was an incredible opportunity to immerse myself in Italy's rich culture, history, and agriculture. We started in Florence and toured the historical city including the Cathedral and Baptistry. As well as touring the Accademia Gallery of Florence to see the David sculpture by Michelangelo. We continued to tour the surrounding areas including Pisa, Pienza and San Gimignano. While visiting the neighboring towns we had the chance to visit a farm that produces olive oil, wine, and Chianina beef. For lunch that day we were served Chianina beef, and we can all agree it was not the AAA Alberta Beef we are used to! The following day we arrived at a Sheep Cheese farm near Pienza. At this sheep farm we were shown how they produce organic cheese from their 400 Sardinian Sheep. We resumed our day by checking out the medieval town of Siena. Siena was an interesting town as they are famously known for the horse races also known as Palio of Siena. The horse races are held twice a year around the town square which is made of slippery cobblestone. The horse races have been held annually since the year 1232. In the following days, we wandered through charming small towns and narrow streets made of ancient bricks and cobblestones, some dating back to Roman and medieval times. We even participated in a Truffle Hunt in Umbria, using trained dogs to locate the underground fungus found in traditional Italian cuisine. On the ninth day, we reached Rome, where the weather was perfect for our extensive walking tour. We began at the Colosseum and then visited numerous churches, temples, ancient defensive walls, and medieval gates. Highlights in Rome included the Trevi Fountain, Spanish Steps, Pantheon, and the Roman Forum. In the afternoon, we explored Vatican City, home to some of the world's largest and richest museums, including the Sistine Chapel with its stunning ceiling by Michelangelo, and St. Peter's Basilica. The next day, we traveled by bus to the small village of Monte Cassino. We toured the War Cemetery, where nearly 900 Canadian soldiers from World War II are buried, many of whom were young men. We also visited the Gari River, the site of one of the bloodiest battles in 1944 during the Italian Campaign. Continuing our journey, we explored Naples, the inner city, and ventured along the coast to Sorrento and Amalfi. In Amalfi, we took a boat to Salerno, providing a different perspective of the coastline and small villages as we sailed across the Tyrrhenian Sea.

After an incredible 15 days in Italy, I was happy to return home to enjoy "normal" food and settle back into my routine, which now includes planning my wedding this summer—a task that keeps me quite busy!

I'm excited for what FFGA has in store. Stay tuned! We have been busy planning events for this summer!

Kayla Minor

(Photo: Kayla and Fiancé Dan)



IN THIS ISSUE

FOOTHILLS FORAGE AND GRAZING ASSOCIATION

FOOTHILLS FORAGE & GRAZING ASSOCIATION

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On the Cover: Chianina Cattle– an Italian breed of beef cattle in the San Gimignano region on the FFGA Ag & sightseeing Tour

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Icebergs and native forages: What you can't see can sink you


Photo: FFGA

In April 1912, the RMS Titanic sank off Newfoundland's coast after an iceberg tore a hole in her hull 25 feet below the waterline. Only a tenth of an iceberg is visible above the water; most lurks beneath the surface. Forage plants are similar; how things look on the soil surface may not reflect what's happening below.

Forages use sunlight to convert carbon dioxide into plant sugars that drive plant growth. To do this, roots must absorb water and minerals from the soil. You've probably seen old pictures of a healthy grass plant with enormous roots extending deep into the soil, and overgrazed grass plants with shallow root systems.

With drought recurring in many regions, you might wonder what affects pastures more — the drought, or overgrazing during drought. James Cahill and co-workers at the University of Alberta studied how grazing season and intensity affected forage yield and root mass under drought conditions (Differential sensitivity of above- and belowground plant biomass to drought and defoliation in temperate grasslands; doi.org/10.1016/j.agee.2023.108660).

What they did: This team collected data at seven predominantly native grassland sites in Alberta representing a range of average annual precipitations (Gem, 312 mm; Onefour, 318 mm; Oyen, 321 mm; Twin River, 358 mm; Kinsella, 401 mm; Sangudo, 492 mm; Stavely, 533 mm). Extreme drought was imposed by installing transparent rainout shelters over half the plots to divert nearly half the precipitation during the growing season. Plots were clipped instead of grazed because cattle would have demolished these shelters.

Five clipping treatments were designed to represent different grazing intensities and timings. The control treatment remained unclipped in June and September (None/None). The Heavy/None treatment was clipped heavily in June (to three cm stubble height) but not in September. The None/Heavy treatment was not clipped in June but heavily clipped to three cm in September. The Light/Heavy treatment was clipped to a seven cm stubble height in June and three cm in September to mimic light early-season grazing followed by heavier grazing after vegetation growth slows. The Heavy/Heavy treatment was clipped to a three cm stubble height in both June and September.

The combination of two rainfall treatments and five clipping treatments allowed them to test grassland responses to 10 different grazing management and moisture scenarios. Each combination was replicated four or five times at each site. Treatments were imposed during the 2017, 2018 and 2019 growing seasons.

After three years, total above-ground forage production was measured by harvesting part of each plot to ground level in July, and 15 cm deep soil cores were collected to measure root mass.

What they learned: During the three years of the experiment, natural rainfall was consistently lower than normal at the driest sites (Gem, Onefour, Oyen and Twin River) but above normal in at least one out of three years at the Kinsella, Sangudo and Stavely sites. The rainout shelters imposed historically harsh or near-record drought conditions at all sites.

Extreme and prolonged drought did not significantly reduce forage productivity or root mass on its own. Native grasses are adapted to environmental challenges.

Clipping plots heavily once in June did not affect forage yield compared to a single heavy defoliation in September, regardless of moisture. But early clipping was more harmful to the roots, particularly under drought conditions. The Heavy/None treatment reduced root biomass by eight per cent under normal rainfall and by 16 per cent under extreme drought. This supports long-standing recommendations to avoid grazing native grasslands heavily, particularly early in the year.

As June clipping intensity increased from None/Heavy to Heavy/Heavy, forage yields declined by 15 per cent under both normal and drought conditions. Root biomass responded similarly, decreasing by up to 23 per cent under extreme drought.

There were differences between locations. Drought had consistent effects on root biomass regardless of how much precipitation each study site received. However, the additive effects of clipping during drought affected root biomass differently among sites. More severe clipping (especially in spring) damaged root growth the most when drought was imposed on grasslands with greater normal rainfall (Kinsella, Sangudo and Stavely).

What does all this mean to you? Heavy grazing may not depress forage productivity at first. But as roots shrink in size and depth, especially from spring grazing, plants gradually take up less water and nutrients. This will reduce their long-term ability to support above-ground forage growth.

Remember that it may take pastures some time to recover from being grazed through repeated years of severe drought. To regrow lost roots, plants need to transfer energy from shoots to roots. But they can only do this if they have enough leaves to begin with! That's why heavy, early-season grazing should be avoided.

The finding that forages acclimated to higher rainfall areas may be more susceptible to heavy grazing during drought is important for Canada's wetter regions. Grasslands may be less adapted to drought in regions where drought is less common, and more heavily affected when it occurs. A moderate drought in a region that normally sees more rainfall may be more damaging than a moderate drought in a normally dry region. Careful grazing management is important everywhere, regardless of what "normal" rainfall looks like.

Bottom line: While native plants can tolerate significant drought, they can't tolerate heavy grazing under drought, especially in spring. Neglecting what's below the surface can get you into trouble with both forages and icebergs.

Author: Reynold Bergen
Original Article: https://www.canadiancattlemen.ca/research-on-the-record/icebergs-and-native-forages-what-you-cant-see-can-sink-you/

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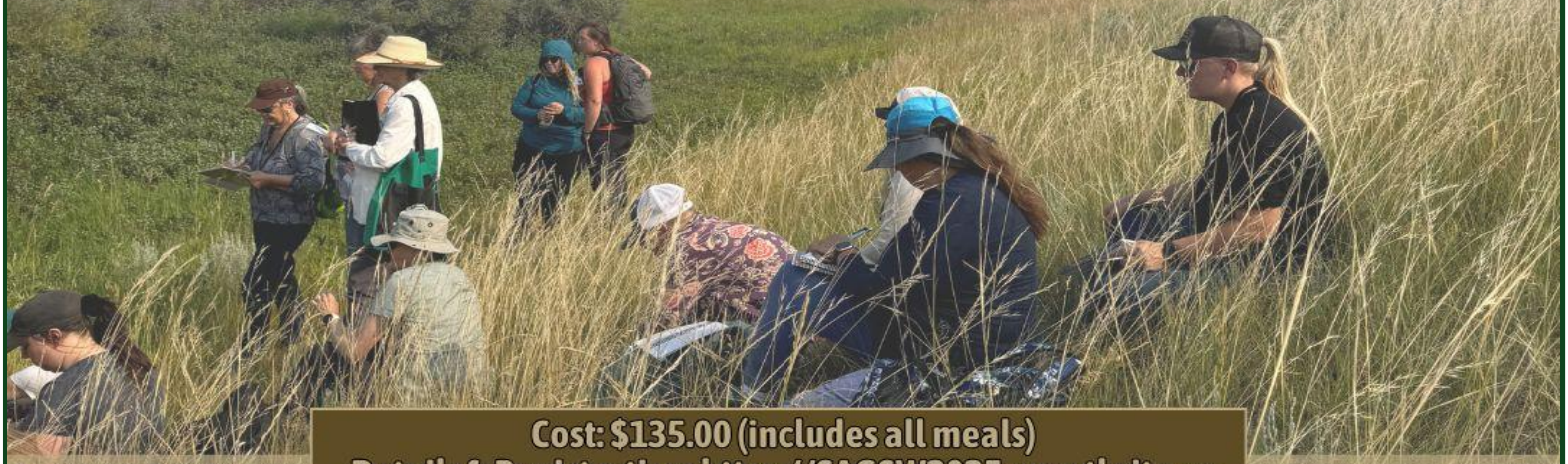

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Cattle producers look for a break in open rate cycle

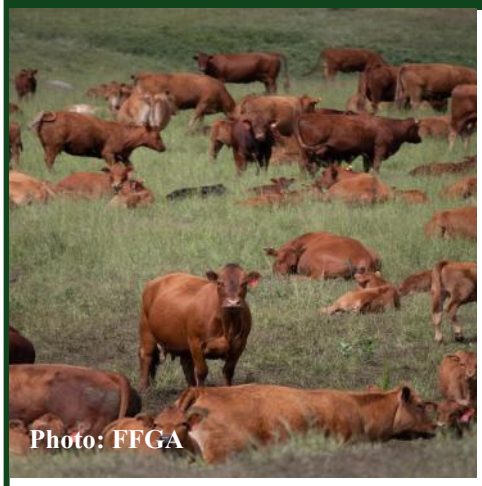


Photo: FFGA

Many beef producers got an unpleasant shock at last fall's preg check, and experts are weighing in on what can be done to avoid a similar problem this year.

According to a report from the Western Canadian Animal Health Network (WeCAHN) over 40 per cent of some herds were found open. That was offset by more fortunate herds with two or three per cent open rates, WeCAHN said, but across all herds, open percentages ranged from 10-12 per cent, compared with eight to 10 the year before. That was even with a potentially weighted sample, as producers may have already gotten rid of open cows before testing, the report noted.

Why it matters: Canada's beef herd is at its smallest in decades, and a smaller calf crop this spring won't help.

Weaning weights were also scattershot. Some farms were up, but others saw much lighter calves. Those were largely the same farms with poor pregnancy catch.

The report pointed the finger at cumulative years of drought. Feed and water were in short supply or of poor quality, and poor protein and feed energy availability likely caused "low to no cycling over the summer."

To illustrate the point, it went on, some farmers saw females start to cycle after they were put on feed in anticipation of being sold.

The abnormally high open rates match observations from Bart Lardner, a professor at the University of Saskatchewan and provincial strategic research program chair in cow-calf and forage systems.

"In some areas, producers have been dealing with three, four years of dry, drought conditions and certainly forage quality has been a big challenge," he said.

At this point in the dry spell, he noted, "a lot of our breeding females, you know, they were conceived in a drought condition, born in a drought condition, raised in drought condition (s). Just talking to some other practitioners or vets during preg check time, even at heifer development time, (we're) finding out that they're taking longer to reach puberty."

Their own reproductive tract development evaluations have noted heifers coming into the breeding season less physically mature than expected.

"They're not catching in that first cycle," Lardner said. "If they catch, it's in the second or the third cycle, so that just delays them."

Nutrition

It all comes back to nutrition, Lardner said.

The link between body condition score (BCS) and reproductive success is well established. The Beef Cattle Research Council notes that cows with an ideal BCS rebreed up to a month earlier than underconditioned cows. They have twice the chance of conceiving, produce more milk and have fewer calving complications, abortions or stillbirths. Their calves tend to be healthier and heavier at weaning.

It's key that females get enough protein and energy in the lead up to breeding season, Lardner stressed.

Unfortunately, conditions at turn out have been less than supportive in the last few years. As well as drought, cold springs and weather events have seen a string of years with delayed pasture regrowth.

Pastures should be at the four-to-five leaf stage, or running eight to 10 centimetres deep before they're ready to support cattle, Lardner cautioned.

Overgrazing offers a similar nutritional problem.

Buying more feed is a hard pill for producers to swallow, particularly after multiple years of drought, poor forage harvests and high feed prices, but if the feed supply is dwindling, and the pasture isn't ready yet, experts warn that producers might not have much choice.

"When you look at a cow's nutritional requirements, the highest nutritional period is after calving," Manitoba Agriculture livestock specialist Shawn Cabak said. "The cow is milking. They have to prepare for rebreeding. The reproductive tract has to get back into condition. They need energy in the low '60s (percentage of total digestible nutrients). Hay by itself will not meet that."

Silage or grain or greenfeed are all higher energy supplemental feed options, he said.

Producers should also consider that fresh grass is mostly water, Cabak said. That has implications when gauging if there's enough feed value on the pasture to adequately support a cow. "For a cow to meet its dry matter requirements, it physically needs to eat close to 200 pounds of forage at that high of a water level."

Don't forget the mineral

Producers may also want to take a close look at their mineral offerings.

Protein and energy deficits, and the corresponding drop in body condition, were big issues, reported WeCAHN, but liver biopsies also supported industry suspicion that copper deficiency was playing in.

"It's important to note that serum trace mineral testing can be useful to identify problems such as copper deficiency, which may be linked to reproductive problems," WeCAHN said, adding that option is both less invasive and less expensive and thus may be attractive to producers.

(Continued on page 7)

(continued from page 6)

Water quality is one major factor. Poor water quality is linked to reduced feed uptake, while sulfates tie up copper.

Water infrastructure improvement, such as the installation of solar waterers or piping systems, has been increasingly stressed by researchers and industry extension staff in the last few years.

Lardner pointed to current federal, provincial and other funding programs meant to help farmers make those changes.

"It's a very complex situation, mineral nutrition. It's not straightforward," he said.

Other than sulfates in the water, molybdenum in the forage can also tie up copper, he noted. High nitrates can be another lurking problem.

"You probably should be looking at testing your water. It's not a difficult task, but at least you know what you're starting with and saying, 'okay, you know what? I do have a water quality issue and I do need to address it with proper micronutrient supplementation."

Phosphate is also important for rebreeding, Cabak said.

Shopping for mineral options

Not all mineral supplements are equally bioavailable, Lardner warned.

Sulfate mineral options are on the low end of that spectrum, while more expensive hydroxy or chelated mineral will get better absorption.

How the mineral is presented will also impact how much makes it into the cow.

If the farmer is opting for granular free choice mineral, Landner suggested shopping around at three or four different companies.

"Read the formulation tag … Ask the salesman about the type and the ingredients and the form of trace mineral," he said.

If cattle are still on feed, that mineral can be added in for more control over uptake, Cabak said. After calving, producers should target two to three ounces of mineral uptake a day.

"If they're on a lot of legumes, a one-to-one mineral works," he said. "If they're on a lot of annuals…then a two-to-one mineral and probably even some extra calcium in there."

Tubs with covers can also boost intake, he suggested. "When mineral gets rained on, it gets weathered, cattle don't want to eat it."

It may also be a matter of brand. Some brands are more palatable to cattle, Cabak said.

Lardner's team has also recently completed research into injectable mineral supplementation. "At least you know the animal's getting that level of copper, zinc and manganese in the injectable form," he said. "Free choice can be all over the place."

That is a more expensive option, he acknowledged, and new to Canada.

Lardner also warned producers not to forget about vitamins. Vitamin A and Vitamin E are "huge," he said, and mature or high-fibre forage under drought conditions might be falling short on those nutrients.

Author: Alexis Stockford

Original Article: https://www.manitobacooperator.ca/news-opinion/news/cattle-producers-look-for-a-break-in-open-rate-cycle/

Spring grazing tips: Walking the line between economical turnout and pasture burnout

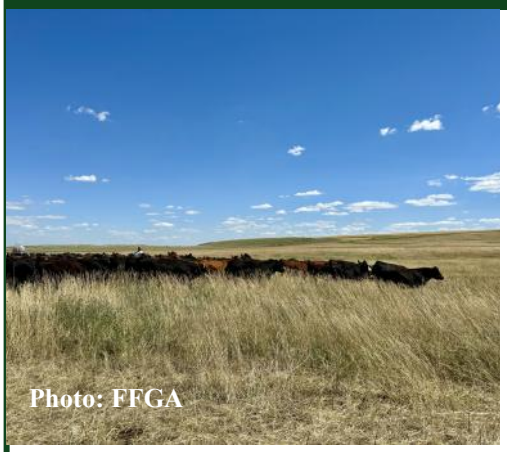


Photo: FFGA

One of the most important decisions a producer can make is when to start grazing, and plant development should be top of mind when deciding, according to a North Dakota grazing specialist.

While many producers decide their grazing time based on what they've always done, or on other outside factors, that's not always ideal, said Miranda Meehan, a livestock and environmental stewardship specialist at North Dakota State University.

"A lot of producers I work with, it's based off of history," she said.

They look at what they've done in the past, and perhaps consider when they can get people to help if they are working the cattle and branding before they put them out.

"So it tends to be more of a 'this is the weekend we have our branding', and maybe not based off of what's actually going on in those pastures," Meehan said at a Manitoba Agriculture Stock Talk webinar on April 10.

WHY IT MATTERS: If forages are grazed too early, plant health can decrease, reducing forage production.

Grazing too early can severely reduce plant vigour and overall forage yield, since early grazed plants do not capture as much sunlight in their leaf area, which they turn into important nutrients. In the long run, this will reduce forage production, research shows.

"By grazing too early, we can reduce forage production by up to 60 per cent in that growing season," Meehan said.

Overgrazed pastures also face increased risk of disease, insects, and invasive weed infestations. However, delaying turnout too long also carries risks, including a risk of forage loss, Meehan said.

"If we're able to graze early, and we don't graze too heavily … we can capture some regrowth on those plants and get bonus grass or bonus forage. But if we graze too late, and that plant … has become mature and set seed, then we're losing some of that potential for regrowth or minimizing that potential."

Early grazing can also be used as a tool in controlling invasive grasses such as Kentucky bluegrass. In North Dakota rangelands, that weed has been showing up earlier in the grazing season, before native cool grass and warm season grasses.

"It gives them a competitive advantage," Meehan said. "If we're waiting too long, we're not going to be able to keep them in check, and we're going to lose diversity and potentially forage production on our pastures."

One way to determine grazing readiness is by measuring leaf stage. Meehan encourages producers to look at their grasses, such as brome or crested wheat grass. If they're at the three-leaf stage, the time is right. For native cool grasses, the three-and-a-half leaf stage is ideal.

Factors like moisture availability, previous grazing pressure, and temperature also affect readiness. Pasture composition is also key when deciding where to graze first.

"Understanding how those grasses grow and what you have out in your pasture is really important, because that's going to influence your grazing readiness in that pasture," Meehan said.

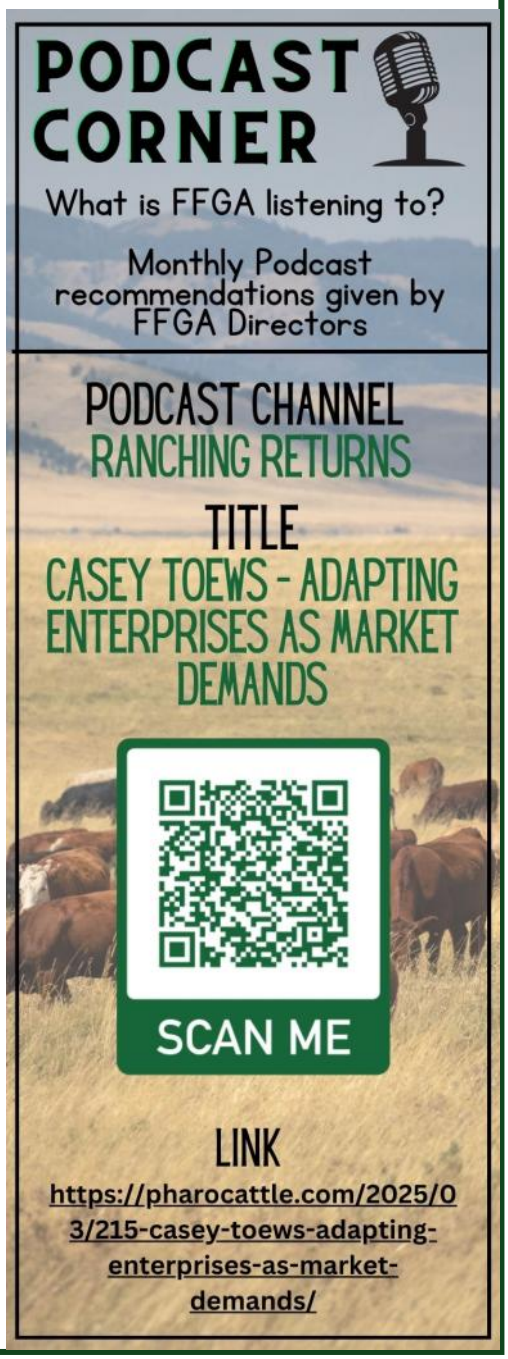
Tame or winter annuals are ideal for early grazing, such as winter wheat since it extends the grazing season without having a negative impact on perennial grasses. However, if native pasture must be used, producers should choose fields with high Kentucky bluegrass or smooth brome presence.

"Maybe we can kick them back, knock them back a little, and improve diversity, while also getting some forage out of them," Meehan said.

As drought has delayed growth in recent years, Meehan warned against overgrazing and emphasized plant recovery. However, one year of overuse won't have a long-term detrimental effect on grazing lands, she added.

"Just make sure that if we graze it heavy, let's give it a break in the spring and let it recover before we get animals out there again."

Author: Miranda Leybourne
Original Article: https://www.manitobacooperator.ca/livestock/spring-grazing-tips-walking-the-line-between-economical-turnout-and-pasture-burnout/



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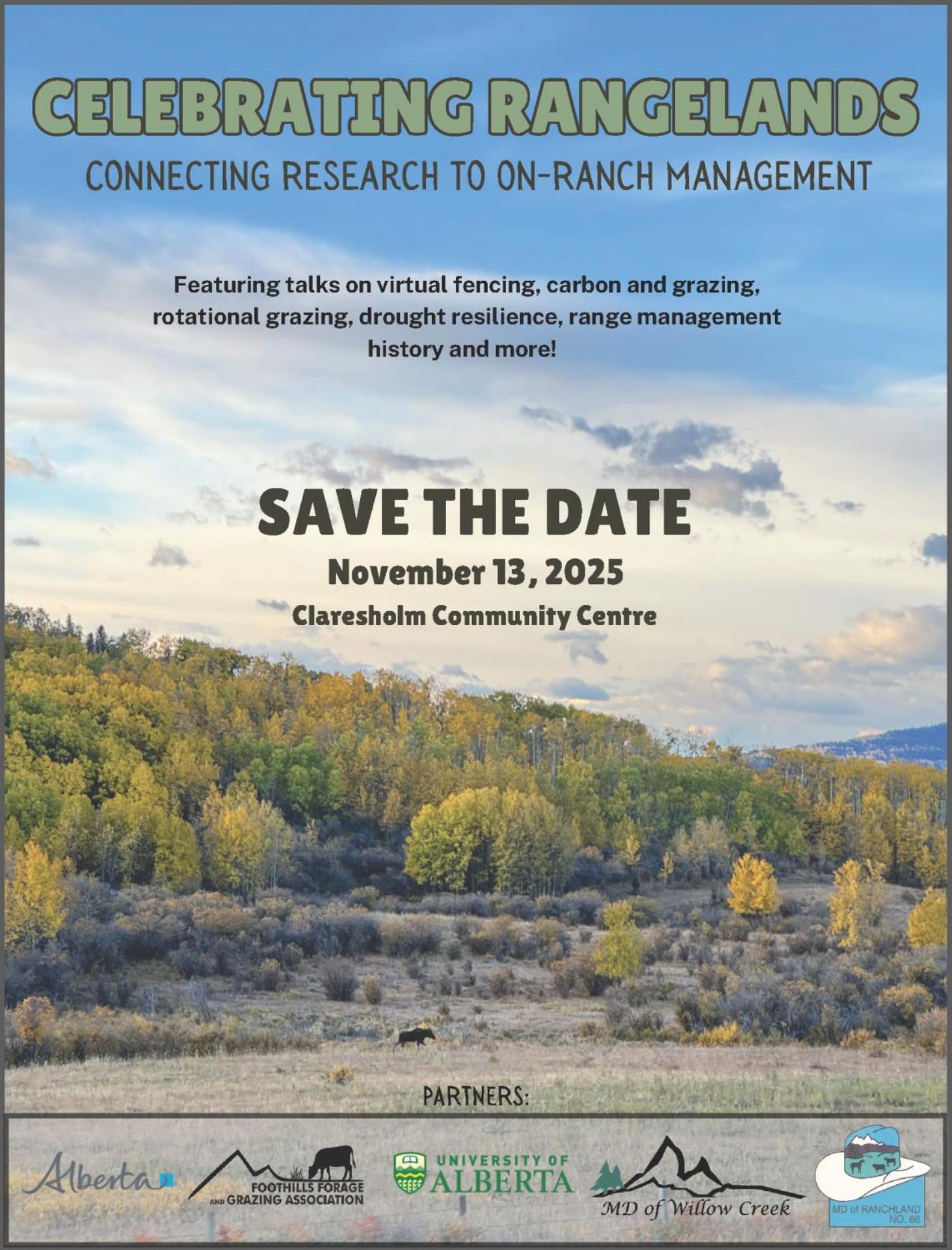
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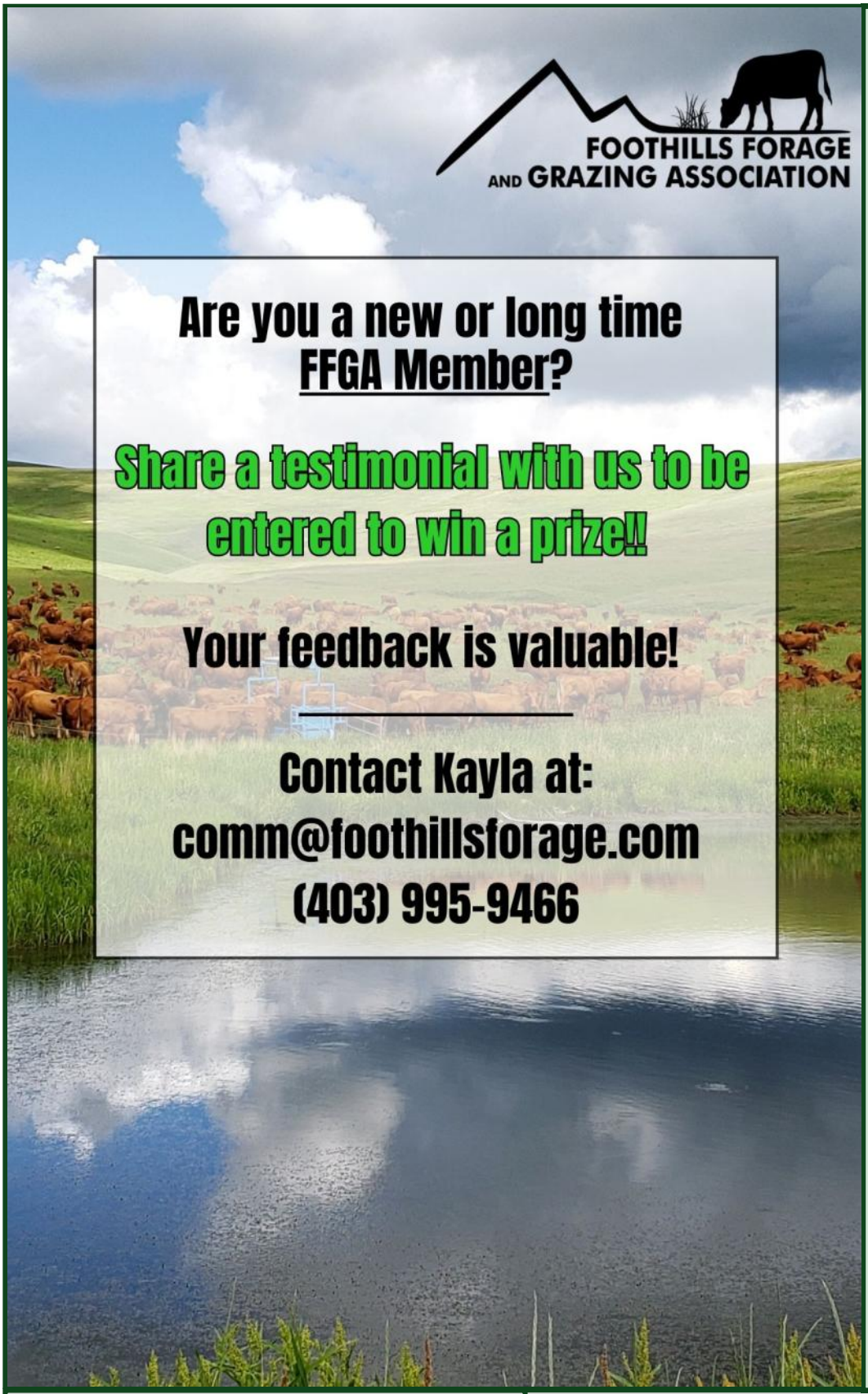

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