

**FOOTHILLS FORAGE
AND GRAZING ASSOCIATION**

Innovation, education and regenerative agriculture

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GRASSROOTS NEWS & VIEWS March 2024

Manager's Note (A year in review) — Laura Gibney

Greetings FFGA Members

2023 came in dry with an early and severe start to the wildfire season, which led to destruction in fire areas, as well as a smoky spring and summer which seemed to affect plant growth in some areas. Later the moisture came in localized areas, some areas staying dry, while others flooded. This did allow for some decent cash and hay crops. The mild winter has been good for feed supplies, but we head into spring hoping for more moisture.

FFGA saw continued growth in 2023. Sonja came back from maternity leave at the end of January, stepping into the Environmental Coordinator role. We were excited to be able to offer Kayla Minor a full-time permanent position as FFGA's Communication Coordinator. Working closely with Alberta Agriculture & Irrigation (AGI) and Results Driven Agriculture Research (RDAR) FFGA's funding increased in 2023. FFGA has also worked hard to diversify our revenue streams in order to grow and enhance FFGA while we strive for stable revenue. Increased revenue along with increased demand provided the opportunity for FFGA to expand our staff by 33% in 2023. The board and staff worked hard on developing a 5-year Strategic Business Plan as well as reworking our staff roles to be a strong and thriving organization. This calculated growth has led FFGA to the position we are in today with a stable, capable, and energetic staff team, a cohesive and engaged board of directors, an active membership, thriving partnerships, and fiscal health. 2023 also saw FFGA expand east due to demand from Newell and Starland Counties. Sonja being based out of Strathmore, has increased FFGA's activity and partnerships in the east country. We look forward to continuing to serve the FFGA membership across our entire region.

FFGA partnered on the delivery of 25 events, and webinars with an attendance of 1,992 people in 2023. Our Grassroots News & Views newsletter continues to be distributed monthly to our members and partners. Currently FFGA has a membership of 155 Farm Businesses, 1,400 hits on the website monthly, 2,900 followers on Facebook, 1,400 on Twitter and 578 followers on Instagram. Through our producer members, online followers, and industry partners our impact on agriculture, the environment, and rural communities continues to grow.

As we move into 2024, we have been busy with our International Ag Tour to South Africa, writing grant reports, wrapping up the 2023 financial year, preparing for our AGM and continuing to deliver events. This spring we will take a moment to catch our breath and gear up for another active growing season of events.

We continue to deliver innovative, regenerative, and pertinent agriculture information to our members through workshops, conferences, field days, webinars, our monthly newsletter, and social media platforms. As always, I very much enjoy working with the innovative and passionate producers through the FFGA membership and board. It has been fabulous being back to in-person board meetings where the energy and ideas flow and create an atmosphere of excitement for the future. Thank you to all of our members and partners for staying connected and supporting us through another year, your support has been crucial as we build momentum and look forward to what the future brings!

Stay connected for another great year,

Laura



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FOOTHILLS FORAGE & GRAZING ASSOCIATION

Member Renewal 2024

Foothills Forage & Grazing Association Membership is \$50 (+GST). Membership is per operation and covers family & staff of each operation.

FOR DETAILS: <https://www.foothillsforage.com/membership>

On the Cover: FFGA's Identifying Cattle Efficiency using Infrared workshop at Lilybrook Herefords. Photo: FFGA

Thank you for your support!



Managing winter water supply



Photo: FFGA

Cold weather is here to stay for the remainder of this winter season. This creates a challenge for producers who house their herds in areas where there are limited water resources and available natural water sources (including ponds, creeks, and stock dams) may be frozen over. Even though water supplies are thought of during hot summer weather to aid in cooling of the body, cattle require this nutrient during all seasons. Water is still required for bodily functions and obtaining production goals during the cold, bitter winter months. A general rule of thumb is that mature cattle require 1 gallon of liquid water per 100 pounds of body weight.

Snow and ice

Cattle may ingest clean snow and utilize it to meet their overall water requirements when it is available. Moisture in the form of snow was hard to come by this early winter in South Dakota. We cannot always rely on snow being available, and some cows will not ingest enough snow to meet their water requirements. Water intake is highly correlated with feed intake, and given the lower quality of dormant forages, we want cattle to be able to eat at their highest capacity.

Ice can inhibit cattle's ability to access water. While cattle may be willing to break through thin ice, it is not a guarantee, and once the ice gets too thick, it is impossible for the animals to break. Ice should be broken periodically to allow access to a water source. This includes natural water sources if those are the main access to water. If breaking ice on a pond or large creek, do not break ice too close to the bank or too far out. Breaking ice too close to the bank causes cattle to agitate the water and mud, reducing water quality; breaking ice too far out increases risks of falls and injuries.

Managing water sources

Water sources should be checked frequently, as cattle cannot go without water for extended periods of time. In periods of

adverse weather, a plan should be in place for assuring that cattle have access to water. Cattle may decrease water intake during blizzards and ice storms in an effort to conserve energy resources, however, a minimum requirement for bodily function is still needed. If the water tank is heated by an electrical source, a backup power source should be in place in the event of a power outage. Furthermore, it is important to check for electrical shorts running through the water supply periodically. These currents may deliver a shock to cattle as they attempt to drink, thus lowering water consumption.

When deciding on what portable tank to use to haul water, make sure that it has not been used with any type of chemical (for example, herbicides, insecticides, or strong cleaning chemicals). This includes the pump and hoses used to transport water. If you are unsure if the tank has been exposed to chemicals, do not use it. Small amounts of certain chemicals can have extreme negative effects and may cause death in cattle. Assure these tanks and their parts are cleaned regularly. Water quality is still a concern during the winter months. Additional information on water quality and cattle production can be found on the SDSU Extension website.

Always provide a source of liquid water to cattle. At times, hauling water may be more economical if the herd can graze longer, rather than being fed hay and other harvested feedstuffs. That being said, do not overgraze winter pastures, as this has negative impacts on future forage production. Refer to the article Protecting Your Pastures While Winter Grazing for additional information on protecting your pastures. When deciding whether to haul water to cattle or bring the herd to a location with better access to water, do not forget to factor in the price of time and labor required to haul water. Other factors to account for include distance from filling location to where the cows are located, and time spent filling portable tanks and stock tanks.

Take home points

- Cattle can ingest snow to meet water requirements; however, liquid water should still be provided.
- Check water sources regularly and break ice if necessary.
- Have a backup plan for assuring water access for cattle during adverse weather or power outages.
- Do not haul water in

tanks and equipment that have housed chemicals

- Do your homework when deciding if it makes sense to haul water versus moving the herd to a location with better water resources.

Author: Madison Kovarna

Original Article: <https://www.beefmagazine.com/farm-business-management/managing-winter-water-supply>

PODCAST CORNER



What is FFGA listening to?

Monthly Podcast recommendations given by FFGA Directors

PODCAST CHANNEL

HERD QUITTER

TITLE

ROOTS AND RUMINANTS



SCAN ME

LINK

<https://podcasts.apple.com/ca/podcast/158-jared-knock-justin-fruechte-roots-and-ruminants/id1555361402?i=1000645004636>

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Minerals take centre stage in winter ration for beef cows

Photo: FFGA



As a beef nutritionist, I take a practical approach to formulating overwinter cattle minerals: complement macro-minerals of a nearly all-forage gestating cow diet, meet the gestation cows' trace mineral and vitamin requirements and put it into a package that most cows will easily consume at a constant daily rate. In this way, I have done my job of contributing to a postpartum healthy cow and her lively newborn calf.

My goal in developing such an overwinter beef cow mineral is to achieve adequate mineral status in the cow herd. I believe that many beef cows are in a state of marginal mineral status when they are brought home from pasture. That's because parts of Western Canada have been affected by reoccurring drought in 2023, in which the pasture grasses were not mineral- or vitamin-nutritious.

I just reviewed a series of lab analyses from pastures under drought conditions, in which their phosphorus (P) levels are 0.10 per cent compared to last year's rainy profiles of 0.22 per cent. Given an average early-gestation cow requires about 0.35 per cent P on a dietary daily basis, it is unlikely that this year's cow meets her total phosphorus requirement without some type of overwinter supplementation. To compound this problem, many producers did not provide any commercial mineral/vitamins on pastures, because they say that their cattle wouldn't eat enough of it on hardened grass.

I am working with a 200 cow-calf producer who was severely impacted by the dried-out pastures during this past grazing season. Plus, many of his cows were treated for foot rot due to soft hooves, despite standing on hard drought ground. Yes, he did feed trace mineral salt blocks on pasture, but felt that his cows didn't draw much benefit from

them.

In developing his new overwinter 22:7 beef cow premix, our plan is to first build the mineral/vitamin status of the cows by respectively supplementing their early- and mid-gestation TMR, which is fed in a big holding area adjacent to his farm. It is made up of low-quality "prairie wool" forage and supplemented with three pounds of corn dried distillers' grains that will be fed during the first couple of months of winter. About Christmastime, the cattle will be moved onto open cornfield grazing until they are ready to calve at the end of February.

This 22:7 beef cow premix will be provided at the rate of three to four ounces per head per day in loose form, poured into plastic three-compartment feeders mounted on old tractor tires. They will be near waterers accessible by the grazing cornfields. Although this premix is well-balanced for this case, I am focusing on four areas of its mineral/vitamin nutrition in particular:

Calcium (22 per cent). It is high in legumes, moderate in grass, but low in low-quality forages and notoriously low in corn plants. This producer had previous issues with milk fever when he started cornfield grazing a few years ago. This problem was solved with heavy calcium supplementation.

Phosphorus (seven per cent). Grains are high in phosphorus but low in drought-stressed crops. Our calculations dictate that supplementing about seven to nine grams of P will help meet this macro-mineral requirement of gestating cows until calving. We also supplemented

magnesium in the same way.

Copper (3500 ppm). This region of Manitoba is low in copper in both forages and soil. In addition, they also contain high levels of molybdenum (plus high water-sulphates) that may render copper unavailable to cattle. Therefore, I add copper in highly bio-available chelated form. Plus, I formulated zinc-methionine into the premix at four gram/ hd/d to harden hooves against foot rot.

Vitamin A (700,000 iu/kg). A gestating beef cow needs about 70,000 iu of vitamin A per day for meeting basic needs, producing colostrum and helping with post-calving issues. Elevated levels of Vitamin E in this mineral (3500 iu/kg) also assists in these areas of cow nutrition.

This is a well-balanced beef cow mineral that I am confident fits the mineral/vitamin part of these cows' overall overwinter feeding program. Yet just because this mineral looks good in the mineral feeder, the producer and I also want to be equally confident that his cow herd will eat it. That's why we added a bit of garlic oil, corn distillers' grain and about 10 per cent salt to its formula. In addition, he will monitor their mineral intake throughout the winter and we will make changes to its formula when necessary.

Author: Peter Vitti

Original Article: <https://www.grainews.ca/livestock/beef-cattle/minerals-take-centre-stage-in-winter-ration-for-beef-cows/>

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MEET THE 2024 BURSARY RECIPIENTS



TARYN ROBERTSON

My name is Taryn Robertson and I grew up on my family's mixed cattle operation east of Longview. As soon as I was old enough, I was on a horse helping my parents move cattle, work at brandings, drive tractor, and help at calving time. I was a part of the Longview 4H Beef Club for 9 years where I realized my love of agriculture. I have established a small herd of commercial cows, made up of my past show heifers, and I have started a small herd of Highland cows. I have already received an Agricultural Management and Production Diploma from Olds College where I graduated with honours, and I am currently attending the University of Alberta working to obtain a Bachelor of Agriculture in Crop Sciences.

I am passionate about the land, cattle, and the health of the soil, and I am looking forward to my future within the agriculture industry. The classes that I have taken at Olds and continue to take at UofA will all contribute to my knowledge and education and will be a part of the experience that I can take home to my family ranch, or even into an industry job at some point.

I would like to express my gratitude and thanks to the Foothills Forage and Grazing Association for this bursary which will help me continue my education.

COLE BLADES

My name is Cole Blades, I am 19 years old and was raised west of Nanton on our family ranch, the Rocking P Ranch. I have been involved with agriculture my whole life and am a 5th generation rancher. I am currently enrolled in the Associate of Business Degree at Central Arizona College with a focus on Agriculture. I also compete on the rodeo team in the tie down roping and team roping. I plan to transfer to a university after my two years at CAC to finish a Bachelor's Degree in Business Applied to Agriculture.

After I graduate university, I plan to move home and use my degree to run the business side of our ranch. I believe that through my education as well as extended education from associations such as the FFGA, I will be able to increase the profitability and sustainability not only of our ranch, but of the forage and livestock industry in Western Canada as a whole.

I hope to become a member of the Foothills Forage and Grazing Association in the future and attend more workshops! Thank you for your generosity!



Red Solo cup suggests perfect cow shape



Photo: Lee Gunderson

A red solo cup is a staple of picnics and tailgates, but can you use one to choose cattle?

Idaho rancher Steve Campbell, owner of Tailor Made Cattle, works with cattle producers who are looking to build their herd efficiency, improve genetics and have a more productive cattle herd. He speaks around the country on cattle fertility, minerals, profitability, linear measures and epigenetics, or how cells control gene activity without changing the DNA.

Originally, Campbell demonstrated the concept of these ideal cattle with a Styrofoam coffee cup lying on its side at speaking engagements. But one day, a forgotten cup was replaced with the iconic plastic red cup and the “red Solo cup” cow was born.

The visual represents how everything gets bigger as you go toward the back end, which indicates a higher fertility level, leading to a more productive animal.

Built differently

At the 2022 North Dakota Leopold Winner Tour in Glen Ullin in summer, Campbell said the Solo cup is an easy reminder of the main shape he looks for in cows.

“Imagine your cows are the shape of that Solo cup lying on its side, with the cow’s head being toward the smaller end of the cup,” he said. “You want females who look like they are walking downhill on flat ground.”

Campbell primarily consults with commercial ranchers who want a cow that is more fertile and costs less to feed. “Eight years ago, 80% to 90% of the people I worked with were grass finishers,” he said, adding that now 75% of his calls are from commercial cattle pro-

ducers looking for cows who are easy keepers and more fertile.

The following selection criteria help identify efficient cows:

- Big belly
- Wide butt
- Slope from hooks to pins

“We’re hoping for a cow that can have 10 to 11 calves in a row without skipping – and this red Solo cup shape is characteristic of those cows,” he said.

LIKE A WHAT? Idaho rancher and consultant Steve Campbell said that cows resembling a sideways red Solo cup are found to be easy-keeping cattle with higher fertility rates.

The larger belly on cattle of this shape is an indicator of higher digestive capabilities. For producers trying to utilize mainly grass, ensuring high feed efficiency is a must.

Butterfat indicators

High butterfat is the second thing to look for when selecting your Solo-cup cow. “You want fine cannon bones from the knees down,” Campbell said. “The smaller in diameter the bone leads to a more tender meat, all with higher butterfat.”

Increased butterfat leads to larger calves, lower maintenance and tender meat, Campbell explained. “The higher the butterfat, the better the beef.”

More physical characteristics for high butterfat include vertical folds on the cattle hide. “The more butterfat, the more vertical folds there are in the hide, which means that hide is loose,” he said.

Further, looking for a bald udder on cows is Campbell’s final indicator of a high butterfat content. “This is actually the No. 1 indicator of butterfat, seeing that bald udder,” he said.

No matter how this beef is marketed, he said that higher butterfat leads to more tender, flavorful beef and happy customers.

High production rates

Taking the animals to a higher plane of nutrition leads to increased production rates for Solo-cup cows. “We want to look for an animal that’s thriving in the environment they’re in, because then we know she can adapt to your ranch environment,” Campbell said.

“I want to see a shiny cow that’s shed earlier than most of the herd, because then we know her gland system is adapted to her environment,” he added.

He explained that shorter animals mean a higher level of fertility, due to the hormone and growth process. “Taller animals are likely less fertile than the shorter ones, as they weren’t producing enough growth hormones like estrogen to shut off long bone growth.”

The Solo-cup cow’s wide back end also lends itself to calving ease, making it less likely to need rancher assistance. “Ranchers need cows that can get pregnant every year, raise a calf and not require a lot of external supplements or substitute feeding,” he said.

“Feedlot producers want steers who work well in a feedlot setting, but ranchers are tired of suffering through their sister’s lack of fertility on the ranch,” Campbell said of why genetic selection plays a crucial role on operations he consults with.

This ties into the concept of a cow walking downhill on level ground. “You want that slope from hooks to pins, so that the pelvis is sloped down,” he said.

For growth, watch for the “anti-fertility bone,” Campbell said. “If you’re selecting animals whose tail process raises up behind the hook bones, you’re selecting against 40% of your profit.”

Next time you’re selecting your cull cattle or choosing your replacement heifers, grab a red Solo cup for the trip. To find out more about Campbell and his consulting work, visit Tailor Made Cattle.

Author: Sarah McNaughton

Original Article: <https://www.farmprogress.com/livestock/red-solo-cup-suggests-perfect-cow-shape>

Foothills Forage & Grazing Association

2024 ANNUAL GENERAL MEETING



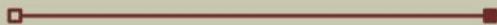
March 21, 2024 – Heritage Inn, High River

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***Please note, you must be a member in good standing to vote during the Business Meeting. Memberships can be purchased online at: www.foothillsforage.com/membership or at the door (Cash or Cheque only) ***



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Feturing Keynote Speaker **CHRIS KOCH**

Chris Koch is a local motivational speaker and actively working in agriculture, despite being born without arms and legs, Chris grew up like any other small-town kid. Today he inspires his audiences to continually challenge themselves and build the life they dream of.



Visit: <https://www.foothillsforage.com/2024-agm>

Please register before March 15, 2024



Calving distribution could help address open rate riddle



Photo: FFGA

There have been lots of anecdotal reports this year about exceptionally high open rates in beef cow herds at pregnancy checking time.

I've spoken to many producers and veterinarians across Western Canada who describe open rates of 20 percent or higher. This is distressing for anyone who experiences it, and nothing can be done now to rectify the situation.

Those cows won't produce a calf in the upcoming calving season and although cull prices are reasonably good, it is still a major economic loss in not having those calves to market at the end of next year.

Why is this occurring? There are undoubtedly multiple factors at play, and we know reproductive rates can be affected by body condition, trace mineral deficiencies, bull performance, infectious diseases, breeding schedules and many others.

However, we have seen multiple years of drought in many parts of Western Canada, and this has undoubtedly had a major influence on the nutritional status of many cow herds.

I often ask myself whether we could have seen this coming sooner and intervened in some fashion to prevent it. In some cases, it's not possible, but I believe the decline in fertility has been occurring over several years and is now becoming evident in the open rates.

Instead of focusing on pregnancy rates or open rates, it might be more prudent to pay attention to calving distribution. I'm sure there are producers who pay attention to this, but I'm also confident that many focus only on pregnancy rate or even the percentage of cows who successfully calve.

Why is a calving distribution so im-

portant? Calving is the only easily accessible reproductive event in a cow-calf herd. In most herds, unless we are using artificial insemination, we don't know the exact breeding dates for each cow. Calving date is the only reproductive event that is easy to track.

However, we know other reproductive events, such as when a cow comes into heat and when she gets bred, are highly related to the date on which she calves.

To create a calving distribution, count the cows that have calved during the first 21 days of the calving season. I use the third cow that calves in her breeding group as the trigger date for the start of the calving season.

Divide this number by the total number of cows that calve in the calving season and multiply by 100 to get the percentage of cows calving in the first 21 days. Repeat this process for each of the next two 21-day periods to calculate the percentage of cows that are calving in each period of the season.

The goal is to have at least 65 percent of the herd calving in the first 21-day period. These cows were probably cycling at the start of the breeding season and were bred in the first 21 days. These cows are also more likely to cycle at the start of the next breeding season and will be more likely to get pregnant in the following year, provided the cows are in good body condition and on a good plane of nutrition.

I suspect that over the last few years of less-than-ideal moisture conditions, we might have seen a gradual change in calving distribution that didn't show up in our open rates until this year. The first year of poor forage production might have put cows in less-than-ideal body condition so they took longer to return to estrus during the breeding season.

As a result, more cows calved a little later. The pregnancy rates were still OK, but now there are more cows calving later.

The next year, the problem may have been compounded again and eventually, as the cows move later into the calving window, they have less time to

recycle and are eventually more likely to not become pregnant. Thus, higher open rates.

Reproduction is one of the most important economic indicators of success in a cow-calf operation. However, focusing only on open rates may not give the entire picture.

There are lots of reasons to try and achieve the goal of having 65 percent of the cow herd calve in the first 21 days of the calving period. Cows that calve then will wean heavier calves at the end of the year. Each extra 21-day period before weaning can result in nearly 39 pounds of extra weaning weight for calves born in this period.

The Beef Cattle Research Council has an excellent calculator on its website to assess this. Heifer calves born in the first 21 days that are retained as replacements are heavier and more likely to cycle as yearlings.

Having a large proportion of calves born in the first 21-day period also creates a more uniform calf crop, which is a marketing advantage and simplifies other management procedures because calves are similar in age.

This year, during calving season, I encourage you to consider tracking the calving distribution. It will provide more information than simply evaluating open rates.

If you use multi-sire breeding pastures, you could also utilize parentage testing to determine which sires are more likely to sire calves born in the first 21 days. That information can provide valuable information about the sires in your herd.

Author: John Campbell

Original Article: <https://www.producer.com/livestock/calving-distribution-could-help-address-open-rate-riddle/>



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Vision: We envision a global community that respects and values profitable forage production and healthy soils as our legacy for future generations.

This Publication is made possible by our major funder - Results Driven Agriculture Research



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