



**FOOTHILLS FORAGE
AND GRAZING ASSOCIATION**

Innovation, education and regenerative agriculture

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GRASSROOTS NEWS & VIEWS June 2024

Chairman's Note — Daryl Chubb

Greetings FFGA Members

I hope everyone is having a great spring. Increased moisture and markets are very inspiring, especially coming off some dry years. I'm sure that this moisture through April & May has improved some surface water levels and soil moisture but has also brought challenges with calving and, for some, getting the crop in the ground. Hopefully June brings us rains and sunshine.

Congratulations to Laura for her 15th anniversary with FFGA! Laura, we thank you for everything you have done and continue to do for our association. As a director, I look forward to continue working with you.

Locally, we have not had this green of a spring for quite some time. We have been on the edge of a few major systems and have not had the "big" dump, but we are not suffering. Soil moisture has vastly improved, but growth has been relatively slow with the cool temperatures. We have been grazing, with some supplementation since early May on Fall Rye and grass. Spring seeding is wrapping up in the area and I have gotten some perennials planted along with some planned swath grazing. Hopefully we can grow some winter feed this year rather than purchasing most of it.

I encourage everyone to stay tuned for upcoming events. Laura, Kayla, and Sonja have some great days planned including a native pasture renovation and establishment workshop near Dalum, Southern Alberta Grazing School for Women at Seven Persons, and a bus tour later this summer (details to be announced soon) and Ranching For Profit in November.

Don't forget that the Western Canada Conference on Soil Health & Grazing is also coming up on December 10-12, 2024 in Edmonton. The agenda and speaker list is not out yet but watch for details to be released soon.

Thanks to everyone for their continued support and attendance at the events that FFGA puts on. This would not happen without you, personal and corporate sponsorship, and the staff of FFGA.

Daryl Chubb

(Photo: Daryl Chubb)



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On the Cover: Sheep and Solar at Whispering Cedar Farm . Photo: FFGA

Thank you for your support!



Cattle turnout timing a balance of forage growth, nutrition



Photo: FFGA

Producers anxious to turn cattle out onto pasture after the long winter months could sacrifice pasture yield later in the summer if the cattle are turned out too quickly.

Why it matters: Turning cattle out to pastures too early or too late has consequences on the cattle's health, the forage quality and quantity.

Tim Prior of Brussels Agri Service, runs a rotational grazing system for his beef cattle in Huron County.

Mother Nature does a great job of taking care of soil and providing the cattle with feed. Farmers want to ensure they don't ruin the soil by putting cattle out too early, as it's what's providing farmers with feed for the rest of the year, says Prior.

Being prepared for the spring turn out starts in the fall, he adds.

For sufficient spring growth and adequate root reserves farmers need to pull cattle off the pastures when there is still enough mass on top.

Heavy fall grazing depletes root reserves, affecting growth in the following spring.

Come spring, putting cattle out when the ground is still wet can create pugging — hoof holes in the sod, affecting the growth of the forage and esthetics of the pasture.

Grass should reach the three to four leaf stage before cattle start to graze.

“At the one to two leaf stage the plant is still utilizing root reserves to support growth,” says Jack Kyle, grazing management consultant. “If the plant is bitten off at one to two leaf stage the root reserves will be de-

pleted and the entire plant will weaken.”

The grasses should be photosynthesizing before putting cattle on the pasture. At six to eight inches in height there is sufficient leaf area for proper plant growth and recovery from grazing.

Yet, waiting too long to put cattle on pasture can create some negative effects on the livestock production, says Christine O'Reilly, forage and grazing specialist with OMAFRA.

“Once plants enter their reproductive stages, feed quality and palatability decline quickly.”

As the forage plants mature, the lignin content increases. Ruminants cannot digest lignin so the nutritional value of the forage is decreased. That affects milk production so calf growth is reduced.

“It can be a struggle to graze every paddock before the plants start to head out, so some farmers will take a first cut of hay from part of the pasture to keep those paddocks in a vegetative state,” says O'Reilly.

Rotational grazing is suggested to ensure forage quality, quantity and animal performance.

“A multi-paddock system gives the opportunity to rest paddocks and allow for sufficient regrowth before the paddocks [are] grazed again,” says Kyle.

Ideally, animals are grazed on one paddock for one day — no more than three. The animals are then moved to the next paddock to allow for sufficient regrowth.

The rest period before a pasture is grazed again depends on temperature and moisture conditions.

“[Rest periods range] from approximately 25 days in the spring/early summer to 45+ days in the mid to late summer,” says Kyle, “Ideally the system has about 30 paddocks per group of animals. Ten paddocks would be minimum per group of animals.”

Spring and early summer bring

times of rapid plant growth, making rotation move quicker.

“For the first grazing rotation, livestock should be moved quickly through the paddocks to nip the tops off everything, which will delay the onset of reproductive growth stages,” says O'Reilly.

As farmers enter into the slower growing seasons of July and August, the rotation slows down.

“The second rotation through the paddocks will be slower [allowing] more use of the grass that is there,” says O'Reilly, “Growth in cool-season grasses slows down as soil temperatures exceed 25 C — this is known as the ‘summer slump.’”

When establishing a new pasture, much like any cash crop, planting should begin once the field is dry and fit for planting conditions to ensure minimal damage.

Soil fertility is usually the most limiting factor in forage production. It is important to take soil tests and use an appropriate starter fertilizer program, says O'Reilly.

Many producers choose to renovate their pastures rather than terminate them and start again.

“Southwestern, central and eastern Ontario had good conditions for frost seeding over (the last few weeks of March), with temperatures below freezing overnight and above freezing during the day,” says O'Reilly.

“Another option is to use a no-till drill to plant into the existing stand once field conditions are good. In both of these cases, success is higher when the pasture is grazed close on the first rotation. This heavy grazing sets back the established plants and gives the new seedlings a better opportunity to compete.”

Author: Jennifer Glenney

Original Article: <https://farmtario.com/livestock/cattle-turnout-timing-a-balance-of-forage-growth-nutrition/>



SAVE THE DATE

SUMMER GRAZING

BUS TOUR

July 30, 2024 - Shipwheel Cattle Feeders, Taber
July 31, 2024 - Fishburn Ranch, Pincher Creek



MORE DETAILS TO COME!
www.foothillsforage.com

Photo: Casey Toews

BACK TO OUR ROOTS; NATIVE PASTURE RENOVATION WORKSHOP

June 25, 2024 – Dalum, AB

Once native grassland has been lost, it never returns to its original state. However, what happens when we decide to try anyways? This workshop will help producers explore what it takes to reduce risk & encourage establishment of renovated native pastures by exploring a seeding project initiated 20 years ago in the Dalum area. Join us for presentations from experts who will give you tools to start planning your own native pasture renovation project.

AGENDA

9:00AM - COFFEE & REGISTRATION AT DALUM COMMUNITY HALL

9:30AM - RANCH HISTORY AND GRAZING STRATEGIES FOR NATIVE PASTURE

10:30AM - SEEDING NATIVE PASTURES; PLANNING, PREPARATION, PLANTING & PATIENCE

12:00PM - LUNCH (PROVIDED)

1:00PM - FIELD TOUR OF WADE CATTLE COMPANY

4:00PM - WRAP UP

COSTS (includes lunch) : FFGA or CARA Member: \$20 / Non-Member: \$25

DETAILS & REGISTRATION: <https://www.foothillsforage.com/nativepasture>



Gold Partners



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Beaver power provides year-long water to Idaho ranch



Photo: Getty Images

Jay Wilde summarizes ranching simply: “Cows need two things—something to eat and something to drink.”

He speaks from experience. In 1995, when Wilde started ranching his family’s high-elevation property in Idaho’s Rocky Mountains, both food and water were hard to come by for livestock.

Today this ranch is wealthy in forage and flowing streams, thanks to Wilde’s determination, many helpful partners ... and beavers.

Wilde was raised on the property with his siblings, where his parents grew grains. Jay had always dreamed of running a cattle operation and began putting in place conservation projects that would provide his livestock with reliable sources of forage and water.

The ranch backs up to public land managed by the U.S. Forest Service (USFS), where Wilde grazes cattle during the summer. But the pastures weren’t very productive when he took over.

In 2005, he mapped out an innovative high-intensity, short-duration rotation system across multiple pastures on his public grazing allotments. By partnering with the USFS on this sustainable plan, he was able to restore healthy, abundant native plants that now provide ample forage.

Unfortunately, the cows were still thirsty by midsummer once Birch Creek, the main stream flowing through the ranch, dried up.

Wilde remembers fishing and swimming in Birch Creek all summer long as a kid, and tried all sorts of tactics to restore year-round flow. Nothing worked. Then one morning over his pre-dawn coffee, it struck him: “Beavers! That’s what’s missing!”

Beavers are some of nature’s best engineers. They gnaw down trees to cre-

ate intricate dams and lodges as their shelter. In turn, their dams act to slow the flow of a stream, creating ponds that recharge the floodplain and raise the groundwater level. This allows water to trickle downstream long after snowmelt and rain taper off.

At one time, there were enough beaver ponds in the U.S. to submerge California, Oregon and Washington. But decades of trapping and hunting beavers decimated their populations. Thousands of streams deepened and straightened, and many wet meadows, small creeks, and floodplains disappeared across the country.

Many ranchers still think of beavers as ditch-clogging nuisances. But others—like Wilde—now realize that getting rid of beavers also reduces the amount of water available for livestock operations.

“Do we want to eliminate beavers and eliminate the water coming out of the canyons, or do we want to live with the beavers?” asks Wilde. “Keeping beavers around makes good common sense when you get down to the science of it.”

After his epiphany over coffee, Wilde tried releasing beavers on his property twice—in 2008 and 2009—in hopes of getting Birch Creek to flow longer. None of the critters stuck around, either succumbing to predators or moving off in search of better habitat.

Disappointed, Wilde instead partnered with the USDA Natural Resources Conservation Service (NRCS) to pipe water into tanks for his cows. Yet even with the stock-watering problem solved, Wilde still couldn’t let go of the idea that Birch Creek shouldn’t dry up.

“We just can’t throw our hands in the air and walk away. That’s not fair to all of the life that depends on the water,” says Wilde.

In 2014, Wilde came across an article about people using Beaver Dam Analogues (BDAs) to create habitat for the rodents before re-introducing them to a watershed. BDAs are simple, low-tech structures that mimic real beaver dams to provide the initial building blocks that help beavers recolonize a stream. BDAs are easily built by hand using mud, cobble, and root wads, or by weaving small branches through posts pounded into the

stream bed.

Wilde promptly called up the two professionals mentioned in the article, who worked at Utah State University and Anabran Solutions. They helped Wilde build 19 BDAs in 2015. Wilde then partnered with the USFS and Idaho Fish & Game to relocate five beavers into Birch Creek—who happily set up shop using the BDAs as home base.

The next year, Wilde hosted a training workshop on beaver-assisted restoration for over 40 natural resource professionals from across the West. Sponsored by the NRCS-led Sage Grouse Initiative, his ranch was a model for why it’s worth investing in low-cost, low-tech methods for restoring streams on private agricultural lands. Workshop participants helped build seven more BDAs, and then Wilde released four more beavers.

As of autumn 2019, Birch Creek boasted 149 dams from the original 26 hand-built BDAs. The stream flowed 42 days longer (until it froze in October), effectively running all season long again.

“When you see the results, it’s almost like magic. It makes the effort worthwhile,” says Wilde.

Re-beavered this Idaho ranch created more water for livestock. And it also resulted in more water for fish—Birch Creek’s Bonneville cutthroat trout populations are 10 to 50 times higher in the ponded sections of the creek than before beavers returned.

By restoring these natural engineers, Wilde’s ranch and its surrounding public lands now boast luscious wet meadows with nutritious forage, healthy riparian habitat for wildlife, and floodplains that are more resilient to fire, drought, and erosion.

Now, Wilde is spreading the word about the benefits to livestock producers of using beavers to fix streams. He’s presented at dozens of workshops and talked to hundreds of other ranchers about what’s possible when you “get onboard with beavers.”

Author: Randal Konik

Original Article: <https://www.beefmagazine.com/policy/beaver-power-provides-year-long-water-to-idaho-ranch>

WESTERN CANADA CONFERENCE ON SOIL HEALTH & GRAZING

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EVENT REGISTRATION ~ OPENS JUNE 17TH ~

<https://www.absoilgrazing.com>

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July 2, 2024

Highfield Regenerative Farm, Calgary

AGENDA

- 9:00am - Coffee & Registration at Highfield Farm
- 9:30am - Presentations by Dr. David Johnson and Dr. Yamily Zavala
- 12:00pm - Lunch (provided)
- 1:00pm - Bioreactor Construction
- 4:00pm - Wrap up

COST

- \$30 (includes lunch)

REGISTRATION

<https://www.foothillsforage.com/soilbuilders>



Finding the right water solutions for a rotational grazing plan



Photo: FFGA

What does a pasture have in common with a marathon runner?

According to Natural Resources Conservation Service State Grazing Lands Soil Health Specialist Tanse Herrmann, they both need time to recover.

“A marathon athlete, for instance, doesn’t train the full length of an actual marathon in their practice sessions,” he said. “If that human trained and performed 26 miles day-in and day-out leading up to their actual event, by the time their event rolls around, they might not have the physical capability of performing to their best level because they’ve overdone it. Season-long grazing is potentially the same thing for our plants.”

Just like a runner won’t be able to perform well if they have overexerted themselves in practice, grazing lands won’t be as productive if they have been sequentially grazed closer and closer to the ground through season-long grazing.

That’s where rotational grazing can help. It’s a system in which a producer’s grazing land is divided into smaller pastures. The animals are concentrated in one pasture at a time, allowing the other pastures to put on more growth, develop their root systems and capture carbon.

“Having rotation available to us for livestock grazing enhances plant health and vigor,” Herrmann said. “It improves soil health, water infiltration, the ability of the plant life on the landscape to perform photosynthesis and store carbon in the organic matter of the growing plants and their living roots.”

Water source

Rotational grazing is good for livestock and the landscape, but it does come

with its own challenges to consider.

One of those is water.

Figuring out how to supply water for the livestock to each individual pasture is a puzzle that every producer will need to solve.

The first step in designing a rotational grazing water plan is identifying a source, Herrmann said.

“Is there water that can be accessed nearby? Are there dependable surface water structures such as ponds, dugouts, or dams in each pasture? Is there rural water available nearby? Can I drill a well?” he asked. “Is there power available to move that water, or do I need to investigate a solar powered pumping system? If we’re operating from a private well, there’s got to be some mechanism of hydraulically moving that water from Point A to Point B in the form of your water tank or automatic waterer.”

The most economical source over the long term will likely be rural water, Herrmann said.

“The least expensive option is probably going to be – if it’s available to you – rural water, particularly if that access meter is already bought and paid for,” he said. “But if it’s flowing nearby or just across the road and you’re able to purchase a tap, provided there’s volume available for that system to provide service, mostly likely that will be the least-cost option to you over that 20- or 30-year lifespan of the infrastructure, the pipeline and the watering facilities.”

Luke Perman operates Rock Hills Ranch near Lowry, SD, with his wife, Naomi, and his parents, Lyle and Garnet. Their operation has cow-calf, stocker yearling, and custom-grazed sheep enterprises, and they have been using rotational grazing for more than 30 years. Their livestock are moved between pastures every one to seven days depending on the herd, the time of year, and which pasture they’re in.

Perman said that his family’s operation uses a variety of different water sources.

“We’ve got three wells that we use to pipe water that services two-thirds of our ranch, probably,” he said. “That other third is mostly serviced by rural water.

We do have some springs that we utilize as well as a trash pump that we use for pumping out of dugouts and dams. Rather than letting the cattle go in and foul up the water, we’ll fence out those water holes, and we’ll just pump out of the dam into a water tank for them.”

Water delivery

Once a water source has been identified, the next step is to figure out how to deliver it to the cattle. Should the pipeline be buried, or will the planned season of use allow the pipeline to remain aboveground or buried shallow?

“The servicing pipeline aboveground often times is going to be just as suitable as buried pipeline for many operations,” Herrmann said.

He pointed out that it’s sometimes easier to get permission to cross a neighbor’s land with aboveground pipe to connect with a water source. When livestock are no longer in that pasture, the producer can pull the pipeline back across the property line.

“In recent years, we have used more and more aboveground pipe,” Perman said. “Sometimes that’s just for summer use, so we don’t really need to have the expense of burying everything. Sometimes it’s because it’s leased ground, and maybe my landlord doesn’t want to invest a lot of money in water infrastructure. So, we just run it aboveground. Sometimes it’s just a matter of ‘We need to get something out there right now.’”

Mobile watering tanks are another way to deliver water to livestock.

“Mobile watering facilities are an excellent idea, particularly for someone who is implementing a fairly intense management scheme, as far as the grazing is concerned,” Herrmann said. “The real value in that is that you might only have to purchase one, two, or three of those setups to service your entire livestock herd and be able to service dozens of pastures with that one or two or three items.”

Perman said that his family has a couple of mobile tanks that they move frequently, sometimes for use with a trash pump, for use with sheep, and to supplement water installations that were designed for a smaller herd than he currently places in a pasture.

(Continued on page 9)

(Continued from page 8)

Regardless of the type of watering facility in use, the Permians use cellular-enabled game cameras with solar charged battery packs to monitor the water tanks. “They cost a little to get into, but data rates are cheap,” Perman said. “They save us boatloads of time checking water tanks.”

Mistakes to avoid

“One thing I’ve kind of learned is that designing a water system is as much an art as it is a science,” Perman said. He noted a few things for producers to consider before installing a water supply.

“Always build with the idea that you’re going to expand on the system in 10 years or 5 five years. Some of our early installations are all inch-and-a-half or maybe inch-and-a-quarter waterline with maybe an 8-foot tire tank, and that was fine for 150 cows, but it’s not fine for 300 (cows) or 500 or 600 yearlings,” he said. “Anytime we’re doing any kind of permanent installation at this point, we’re making sure that we have the ability to expand by either adding a second

tank at that site or doing an aboveground waterline that we can run from that location a half-mile away.”

Another mistake to avoid, Perman said, is making an installation permanent before it has been tested.

“The main mistake we’ve made is making it permanent, thinking, ‘This is exactly how it needs to be, and it’ll never need to be any different,’” he said. “I feel like the best scenario is you run aboveground pipe with a portable tank, and you put it there for five years, and if you’re happy with it after five years, then you bury it and you make it permanent. Because sometimes you spend all the money to get everything installed permanently, and then six months later you realize, ‘You know, we should have put it over there.’”

Herrmann noted that it’s important to make sure a pasture has enough water sources for its size.

“If I’ve got a 500-acre pasture and only one watering tank out there, that can be a concern if that tank is clear up in the far corner of that pasture and the animals have to walk three-quarters of a

mile or more,” he said. “All of sudden we’re giving up gains in performance in those livestock simply because of the amount of exercise they have to put forth to go get a drink of water.”

Perman also said producers should do their homework on what type of valve they should use on their water tank.

“I’ve gone to using just about exclusively these full-flow type valves or diaphragm-type valves because just as soon as that water level drops half an inch, the water is coming in at the full rate rather than the other style where the water has got to drop close to a foot before you’ve got the full flow,” he said. “Well, that’s probably a fourth of your tank capacity sometimes if you’re waiting for it to drop a foot.”

Author: Stan Wise

Original Article: <https://www.tsln.com/news/finding-the-right-water-solutions-for-a-rotational-grazing-plan/>

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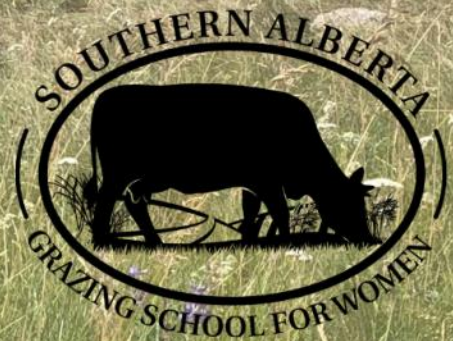
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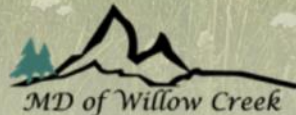


 @grazing schools for women

Cost: \$125.00 (includes all meals)

Details & Registration: <https://SAGSW2024.eventbrite.ca>

Register before July 17, 2024



Creating Drought Resilience by Harnessing Nature's Engineers

Water is crucial for any grazing system, but especially so in a rotational grazing system. With drought front of mind, could it be possible that we are overlooking our natural ally in drought resilience? Jay Wilde from Preston, Idaho, will share his rotational grazing journey and how beavers played an integral role.

10
June

Seven Persons Hall,
Seven Persons

11
June

Rugby Hall, Didsbury

13
June

Maycroft Hall, Cowley

AGENDA for June 10, 11 & 13

- 5:30pm - Registration
- 6:00pm - Supper (provided)
- 7:00pm - Presentations and Networking
- 10:00pm - Wrap Up

Cost: \$30 includes supper

AGENDA for Field Tour - June 13

- 1:00pm - Registration
- 1:30pm - Tour (Porcupine Hills)
- 4:00pm - Wrap up

Cost: \$20 or free with attendance at evening session



Details and Registration:

<https://www.eventbrite.com/cc/creating-drought-resilience-507009>



Alberta Environmental Farm Plan

Maintaining a healthy environment is essential to the success of Alberta's agricultural producers. The Environmental Farm Plan (EFP) program helps you identify and address environmental risks in your operation. It will also increase your understanding of legal requirements related to environmental issues. An EFP is required for many funding programs!



To update or start an EFP, visit:

<https://www.albertaefp.com>

or

Contact Sonja at: enviro@foothillsforage.com /

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Don't leave it until last minute! Contact Sonja today!



Mission: Assisting producers in profitably improving their forages and regenerating their soils through innovation and education.

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

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