



Innovation, education and regenerative agriculture

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## GRASSROOTS NEWS & VIEWS SEPTEMBER 2021

### Director's Note — Emily Lowe

#### Howdy folks!

And in a blink of an eye, summer 2021 has just about passed us by! Like much of the province, Granite Cattle Company has experienced very little moisture through the growing season which meant scaling back grazing plans for the year. Throughout our area, fall work on many operations has begun early, to combat lack of grass. Weaned calves are already hitting the auction marts and yearlings are starting to come off grass. Fortunately, however, some pockets in the area have received enough moisture to produce reasonable silage crops. Late summer rains here, west of Nanton helped mitigate the fire risk, and give an opportunity for a crops to fill out in the seed head a little more, however they were untimely for improving the grass situation – With that being said, the 4 inches we received in less than a week were still appreciated!

Drought mitigation is obviously at the forefront of many producer's minds at the moment, therefore FFGA is looking forward to hosting a few workshops in the coming weeks such as; Building Soil Carbon Through Regenerative Agriculture workshop (page 8) at the Eagle Hill Community Center, near Olds on September 14th. Other upcoming events include Working with Cattle, Working with People How to get along (page 10) which will focus on low stress cattle handling with Dylan Biggs and applying learned herd dynamics to how you work with people. We are also in the

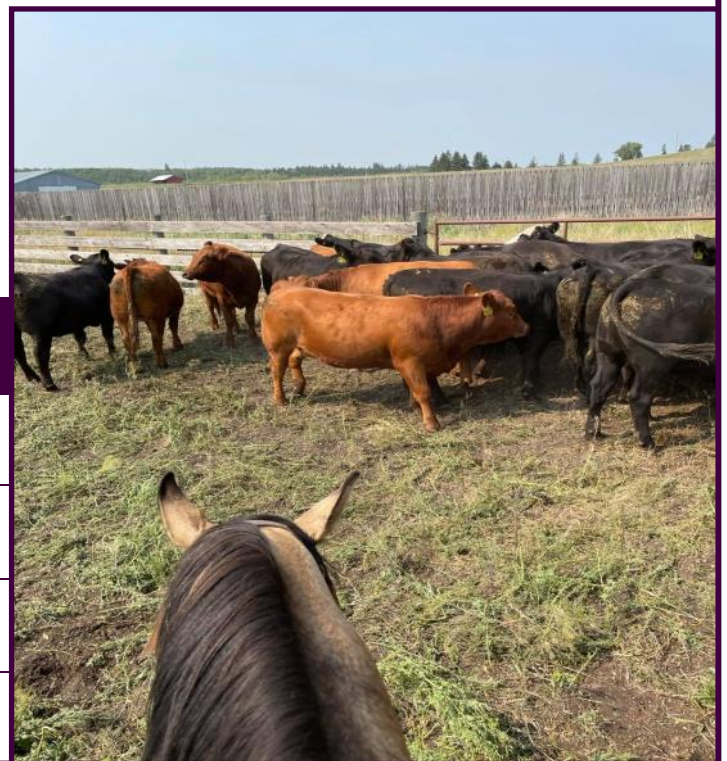
early planning stages for a “Feed What You Need” style workshop in the Pincher Creek area mid/late October which will focus on feeding strategies, feed testing and discussing how drought impacts your decisions. Check out the website to register and for more details.

I would also like to thank all of those who attended our most recent filed day at the a7 Rancho on August 25<sup>th</sup>. The event was extremely well attended, with over 80 registrants. Hopefully everyone took something away from the discussions surrounding grazing management, carbon pricing and watering systems!

Good luck through the fall run and may the calf prices be in your favor!

*Emily Lowe*

*Photo: Emily checking on the cows at Granite Cattle Co..*



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# AgSmart 2021—A Rancher's Perspective



Thanks to Foothills Forage and Gentec, my son Mark and I was able to attend AgSmart at Olds College. The two-day event featured a number of talks about research projects, as well as field demos on the latest tech gadgets ranging from drones to autonomus equipment.

I will talk about some of the more cattle and grazing related presentations.

Geoffrey Shmigelsky and his team at OneCup AI, showed us how his camera system called "Betsy" can, not only recognise individual cattle, but keep track of them and alert you if an animal looks sick or has gone missing.

Very cool technology, the only issue for pasture grazing seems that WiFi is needed, which likely isn't available across many miles of land, but can probably be rectified with WiFi extenders.

Next, we heard how Olds College along with Nielson Cattle Development had done a study, acclimating heifers to the chute before AI breeding.

During a period before breeding the heifers were given a small amount of grain upon leaving the squeeze. This was repeated a few times, triggering the heifers to associate the squeeze with a good thing. This resulted in a 2-3% higher pregnancy rate compared to the control group.

Sean Thompson also from Olds College took us through some Smart Ranch Innovations that the college has been exploring.

By using an Allflex activity tag, they were able to track individual animals for, estrus detection, as well as a number of health-related issues.

Using GPS collars, they did a cattle preference study of some of Union Forage's cocktail crops. I think the "Rocket Fuel" blend came out on top.

An interesting future product they will be looking at is the "Nofence" virtual fencing system, where the cow wears and collar that will give them a shock if they get too close to the virtual fence line.

Dr. John Basarab along with the team from Livestock Gentec showed us how their genetic testing can improve production efficiency and health resilience, fertility, and carcass quality in beef cattle.

The test can, among other things, tell which animals are more feed efficient, in other words an animal that eats less than average, but still gains as much or more than others.

The herd improvement will not be instant, but it has huge potential especially in years when feed is in short supply.

Jessica Rogerson with West-Central Forage Association presented a study more down to earth, but equally valuable to the rancher.

Her study involved genetic testing for parenting in multi sire commercial herds.

The study confirmed what many of us had feared. Some bull had sired 50 calves, while others as few as 1 or 2.

Many factors are of course involved and future studies will look at whether a young poor performing bull will improve

with age.

Dr. Natasha Kutryk with Feedlot Health showed us how she with the help of a drone and a computer program can do inventory of thousands of feedlot cattle in a matter of minutes.

She told us about the Australian smart ear tag called Ceres, that can pinpoint the location of cattle in real-time and be very useful for telling us if pasture cattle are where they are supposed to be.

Norm Ward from RangeWard demonstrated his fully self-contained electric fencing systems, designed for cross fencing and rotational grazing. A handy little trailer that holds the energizer, solar panel, battery, many step-in posts as well as rolls of braided wire rope, that rolls up with the touch of a button.

His line up now includes a unit for bison and one for sheep.

Finally, we had a visit with RDAR, our research funding organization, that mentioned that if we (Foothills Forage) are interested, they have money available for drought related research projects. Anything from soil, to grazing and water projects will be considered, as long as it is drought related. So, give that some thought and see what you can come up with.

Best regards and still doing the rain dance.

Phil Norregaard

*Photo: Clinton Brons (right) with Gentec presents Mark Norregaard (left) with the grand prize Smoker. Mark was successful in choosing the right heifer*

*On the cover: You can't have a field day about soil carbon without digging up some soil to study. Photo: Sonja Bloom*

## Thank you for your support!







# Environmental Farm Plan Workshop Series



## Locations & Dates:

- Vulcan County Municipal Building - September 28, 2021
- Highwood Golf Course - October 7, 2021
- MD Willow Creek Municipal Building - October 28, 2021
- Rocky View County Municipal Building - November 4, 2021
- Mountain View County Municipal Building - November 9, 2021
- MD Pincher Creek Municipal Building - TBD

## Registration Information:

- Visit [www.foothillsforage.com/events](http://www.foothillsforage.com/events) to register for each workshop
- All workshops will start at 10:00am and wrap up around 3:00pm. Lunch will be included.
- Please bring -
  - Laptop or tablet
  - Information on your water sources & water bodies
  - If you are renewing your EFP and you have your old binder please bring it as this can be helpful



# Livestock and feed resources planning during drought



When forecasted to be in [drought conditions](#) across Oregon and other states, the options to start planning for include: buying feed, alternative feeds, selling livestock, and weaning early. Also grazing management should help keep pastures strong and more likely to survive drought and continue to produce well in later years.

## **Purchasing Feed**

Hay is usually best to purchase early in the year in case people sell out. Although sometimes the price per ton goes down late in the year if there are excess hay stocks to get out of the pole barns. In a drought year use caution and do not to wait too long.

Don't limit your purchases to grass or grass-legume mixtures, consider using **alfalfa hay** as an option. Usually higher in protein and energy than grass hay or grain hay, it is sometimes available at a lower cost.

Some fair quality alfalfa (less protein than premium and good quality alfalfa) or even rained-on alfalfa hay might meet the nutrient requirements of your livestock, just make sure it is not moldy. OSU recommends producers never feed moldy hay to livestock. **Oat hay** can usually be found on the market and is a viable alternative if used in a ration balanced to meet animal nutrient requirements.

## **Alternative Feeds**

### **Grass seed by-products**

Another option in times of forage shortages is to feed grass straw or grass seed screening pellets. If you choose to buy fescue or ryegrass straw or seed screenings, make sure they are not from harmful, high endophyte varieties.

Choose this byproduct from a non-endophyte, a low-endophyte, or a "Friendly" endophyte variety of the grasses. As you may know, endophytes are a type of fungus that helps protect the plant from disease. The turfgrass-type

fescues for lawns and golf courses have endophytes that release endotoxins (ergovaline and lolotrim B) that are problematic for livestock.

There are novel or friendly endophyte forage varieties that are not harmful to livestock, but these are special cultivars. You should confirm or test products for endotoxins and blend them with other feeds for a total diet with a tolerable concentration.

Alternatively, you could feed no more than 50% grass seed screening products. Check labels on feed bags as they have feeding instructions.

### **Residual forage**

Although the nutritive value of mature forage that is standing in the field can be very low, cows, sheep and other ruminants can use this if they're also fed a small amount of supplemental protein.

Consider renting mature pasture and supplementing it with alfalfa hay or another protein source (for example, soybean meal or cottonseed meal).

You don't have to feed the protein supplement every day. Protein supplements are actually used more efficiently if you feed a double dose every other day, or three times the daily amount every three days. This improves both labor costs and feed efficiency.

### **Grain**

Feeding some grain is a way to decrease the amount of forage needed to winter (or summer) livestock. Depending on the cost of grain and hay, it may or may not be more expensive. Feed grains in long feed troughs with ample room for all animals to eat at the same time and to avoid bossy cows or ewes from eating more than their share. Split barrels or large diameter conduits in half or construct wooden feed troughs.

Generally, your goal for a full-sized cow should be to substitute 10 lbs. of grain for 15 to 20 lbs. of forage.

Slowly adapt animals to grain diets by substituting a few pounds of grain for a few pounds of hay. Every few days, increase the amount of grain in the diet until you reach the desired grain level. This could be done over a period of 2 to 3 weeks. Generally, your goal for a full-sized cow should be to substitute 10 lbs. of grain for 15 to 20 lbs. of forage. In finishing rations, ruminants can be fed more grain than this but still require a diet that is at least 10% forage (pasture or

hay) for a functional digestive system. Remember though, the current strategy is for saving on hay, not fattening the livestock.

An example ration is for a 1,200-lb cow that usually eats about 30 lbs. of hay (2.5% of her body weight) each day. She could be transitioned from an all-forage diet to a diet of 15 lbs. of forage and 10 lbs. of grain. If you need to feed more grain, slowly adapt her to the diet over time.

A high-grain diet contains more energy than mature cows need. Although the cow's need for feed will be satisfied, she will probably gain weight on this diet. The animals will probably vocalize because they feel hungry due to the lack of fill, but they should get used to the new amount of feed in two to three weeks.

### **Wet Brewers Grains**

These and other by-products can be used to feed livestock, but their nutritional value may vary from batch to batch, and they usually require special storage or rapid use to avoid spoiling. Additionally, the supplier may require you to pick up the product on a regular schedule. For more information, see [Wet Brewers' Grains for Beef Cattle](#) from University of Florida.

Make any diet changes slowly so as not to upset the animal's digestive system, especially if adding grain.

Major changes should be done gradually over a two-week period.

## **5 ideas for planning during a drought**

### **Testing feeds and balancing rations**

You should test your hay and byproducts feeds for nutritive value. New feeds or feed combinations will require new knowledge on how to balance the diets for the livestock you are feeding.

See [Matching Hay Quality with Animal Nutrient Requirements](#) for an overview. For detailed information you will want to follow the OSU [Beef Cattle Nutrition Workbook](#), in particular:

- Animal nutrient requirements (Ch. 1)
- Lists feeds, testing, and nutritive values (Ch. 2 & 3)
- Information on supplemental feeds cost and analyses (Ch. 6)
- Many Applied Research & Forage Associations have hay probes you can borrow to sample the hay. Send

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the samples to a lab for analysis.

### Consider costs

If you are feeding animals with low nutrient requirements (dry cows and ewes, maintaining bulls and rams, overwintering calves), good quality hay alone will probably be the least expensive ration.

But, if you are feeding animals with higher requirements (lactating cows and ewes, replacement heifers and ewe lambs) or using low-quality forage (poor quality hay or grass straw/screening pellets), you will need to add supplemental protein and energy.

If feeding low-quality hay, using grain may cost less than using higher-quality hay (alfalfa or high-quality grass hay) to make up the additional nutrients required for satisfactory animal performance. Check prices and make calculations carefully before choosing a ration.

### Reduce animal numbers

Consider culling undesirable animals. Have your veterinarian pregnancy-check your cows and ewes and get rid of the open ones when market conditions are favorable compared to feed costs.

Cows are normally culled in the late summer or early fall after calves are weaned, so the market is flooded, and prices are lower at that time compared to the winter or spring months.

### Early weaning

If forage is in short supply or cow body condition is low, calves can be

weaned early (before 7 or 8 months). This preserves cow energy reserves to allow for development of the new calf inside her and keep her in good shape for timely re-breeding after that calf is born.

Studies have shown, that in times of forage shortages, it can be economical to wean calves early. In those cases, the cost of feeding early-weaned calves was more than offset with improved reproductive performance of cows that were kept in a body condition that favored efficient reproductive performance.

See more from OSU Extension about weaning [beef calves](#) and [baby lambs](#).

### Protecting pastures

Careful Grazing management now and this fall can help keep pastures strong and resilient for survival and drought recovery. The recurring theme in many forage publications points to leaving an appropriate post-harvest stubble height (2 to 4, even 6") for the specific type of grass (ryegrasses, fescue, orchardgrass) growing in the pastures. There are at least three different reasons for this.

1. The above ground stubble, the crown, stores energy for plant maintenance and regrowth.
2. Ample leaf tissue remaining on a plant is used for capturing solar energy by photosynthesis for growth and replenishing energy in the crown after a growth event.

3. Deep root growth reflects good above-ground growth and is important for reaching moisture and nutrients deep in the ground.

Graze too short and you hinder the ability of plants/pasture to regrow. Many pasture forages are perennials and are only dormant, not dead, during the summer. Be careful not to over graze pastures now and they will repay you with forage later. For more information on grazing management and drought see the following publications and fact sheets:

- [WSU Drought Advisory: Managing irrigated pastures and grass hay land](#)
- [Overgrazing: The sin of all sins](#)
- [Understanding plant root growth in fall](#)

Whether you find enough hay or not, we hope you can use the tips in this article for using feeds wisely. The suggestions should help until we get rain and forage growth.

*This article was written by Oregon State University and was written for that general area. However, points & strategies found in this article are applicable for Alberta. If you are reading this on hard copy you can search for any of the highlighted titles in your web browser. If you are reading this online, click on the links provided to read more.*

Original article can be found at <https://extension.oregonstate.edu/animals-livestock/beef/livestock-feed-resources-planning-during-drought>

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prairie habitat  
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Sp Adobe Spark

# How ag plastics recycling works in Alberta – challenges and opportunities



*Used grain bags to be processed for recycling at the PolyAg Recycling plant, Bashaw, Alberta. Photo supplied*

Every farmer in Alberta who uses tools such as plastic grain bags, agricultural baler twine and bale wrap faces the same obstacles for disposal once these products have served their purpose. Options are slim, and depending on where farmers are located, may include only disposal at the local landfill or behind the farm gate.

Some farmers are close to locations where Cleanfarms operates pilot projects to test and identify best practices in collecting used ag plastic such as specifying that materials be prepared properly to facilitate efficient transportation and processing for recycling. One such pilot is led by the multi-stakeholder Agricultural Plastics Recycling Group (APRG) through funds granted by the Government of Alberta and administered by Alberta Beef Producers. While the intention is to develop a province-wide program, collection sites for these materials are not yet available everywhere.

One exception is Cleanfarms' recycling program for empty pesticide and fertilizer containers that was launched in Alberta more than 30 years ago and that still operates across the province as well as nationally. In the last few years, Cleanfarms has added a recycling program for non-deposit drums and totes up to 1000L, too. Return rates of these small and large

containers are increasing year over year.

Nearly everyone agrees that recycling these plastics is a better practice than landfilling or on-farm disposal. The environmental benefits and farm sustainability for future generations are reason enough. But there is also recognition that finding a way to recover natural resources and use them again and again is better than the one-way street of use and discard.

To realize the environmental good that resource recovery and recycling promises, farmers find that they have to invest a little more in the process. For example, grain bags need to be shaken free of residue grain and crit-

ters, and then tightly machine rolled for transportation. Similarly, it's important to shake excessive dirt, sand, debris and snow from both grain bags and twine. These steps are required to ensure the processing facilities can utilize used plastics for recycling.

Recycling know-how improves every time Cleanfarms conducts a pilot because each project is designed to figure out what makes a successful recycling program and what will cause it to falter.

It has become clear, for instance, that after use, each type of material has to be managed individually because they have different plastic properties and go to separate final recycling destinations.

Grain bags are rolled; twine is placed in Cleanfarms recycling bags. Cleaned up, sorted materials can be recycled. Excessively dirty and co-mingled materials can't. It is as simple as that.

Once farmers take used materials to recycling collection sites, Cleanfarms arranges for transport to recycling end-markets located throughout Canada and the USA. Two such facilities for these plastics are situated here in Alberta: Crowfoot Plastics is near Hussar and PolyAg Recycling Inc. is in Bashaw.

Depending on the type of plastic, the recycled material is used to make new products such as agricultural fence posts,

car parts, dimensional plastic lumber, plastic pallets, and planter pots for greenhouses to name a few.

## Challenges of Recycling

Though recycling ag plastics continues to expand and improve, it still faces challenges that include:

- Compacting plastic to bales for efficient and cost effective transportation (the largest challenge).
- Getting clean used materials that are free of excessive dirt, sand, debris, ice and snow.
- Maintaining a steady collection of these plastics to ensure the recyclers have sufficient feedstock.
- Encouraging the use of recycled content in the manufacture of new products, which drives demand for used materials, lowering the cost of using recycled vs. virgin content.
- Encouraging procurement that specifies recycled content to fuel and stabilize the value chain.
- Building resilience into the system to withstand fluctuating prices for recycled commodities.
- And finally, to dispel an old myth, recycling is not free. Like other economic processes, it costs money to operate.

It's true that recycling is a complex business but it is equally true that we are closer now to forging the pathway to an economically feasible and operationally efficient ag plastic resource recovery system. Alberta farmers can be proud of how they have helped develop better systems by participating in Cleanfarms' existing programs like the annual collection of small jugs and large totes and drums, the program to collect and properly manage for disposal unwanted and old pesticides and animal health medications, as well as the various pilots. Plus, they can look forward to the near future when the grain bag and twine recycling program will serve Alberta farmers province-wide.

## About

Cleanfarms and the Alberta Agricultural Plastics Recycling Group (APRG) are publishing a series of information articles for Alberta farmers to develop a

*(Continued on page 7)*



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shared understanding of the importance of used agricultural plastics resource management.

A common theme throughout this monthly series will be an exploration of how ag plastics, once used, can be recycled to reclaim the natural resources and the invested energy, returning them to the economy where they can be remanufactured into new products.

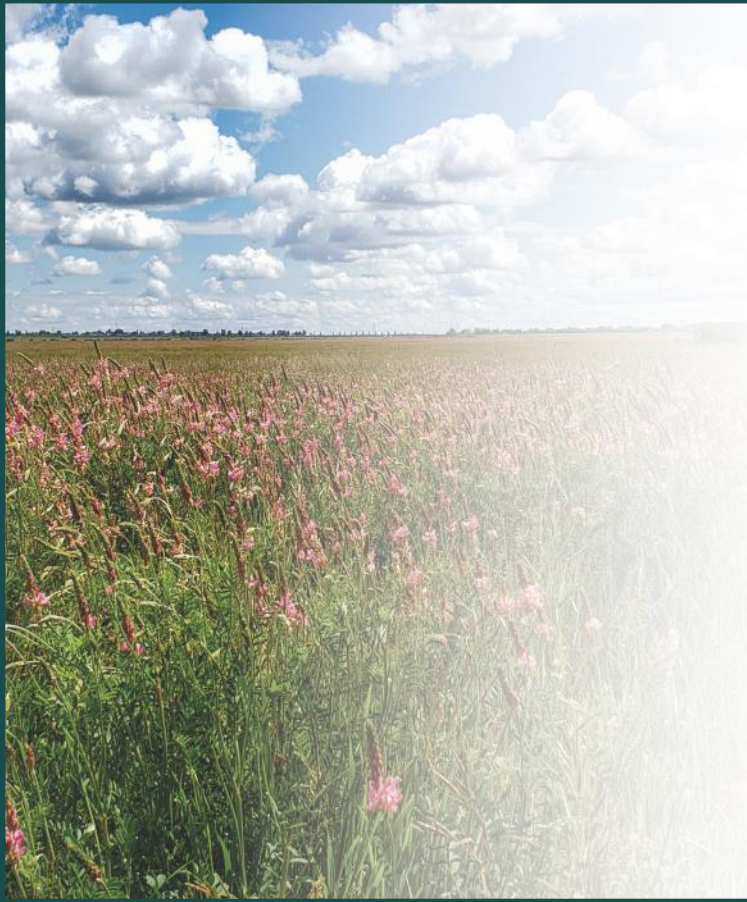
This practice is important to Alberta farmers because it contributes to agricultural sustainability that begins and ends on the farm, providing stewardship for future generations, as well as environmental health. Future articles will feature discussions on change management such as first sellers and manufacturers taking responsibility for used materials (extended produc-

er responsibility), and explore practical recycling, including opportunities and challenges, for products such as grain bags, silage and bale wrap and baler twine that have real-time applications for farmers.

Cleanfarms is operating a three-year pilot project for grain bag and baler twine recycling in Alberta. The project is led by the multi-stakeholder APRG. Funds were granted by the Government of Alberta and are being administered by Alberta Beef Producers.

Article supplied by CleanFarms. **Cleanfarms** is an agricultural industry stewardship organization that contributes to a healthier environment and a sustaina-

ble future for Canadian agriculture by developing and operating programs across Canada specifically for farmers that collect used ag plastics for recycling, as well as other ag-related used and unwanted materials for recycling or safe disposal. [cleanfarms.ca](http://cleanfarms.ca) The **Agricultural Plastics Recycling Group (APRG)** was formed in 2017 and comprises more than 20 organizations representing agricultural producers, retailers, manufacturers, municipalities, non-profits and others. The group is committed to finding solutions to manage agricultural plastics [aprg.ca](http://aprg.ca)



## Agronomy & Forage Specialist Support

In partnership with Agriculture Research Extension Council of Alberta, FFGA is pleased to offer Forage & Agronomy Specialist support to Foothills Forage & Grazing Association members across Alberta!

### Forage Specialists:

- Grant Lastiwka
- Barry Yaremicio

### Agronomy Specialists:

- Bill Chapman
- Neil Whatley

### Economic Specialists:

- Ted Nibourg

To access this support please call into the FFGA Office at 403.995.9466 or send an email to; [manager@foothillsforage.com](mailto:manager@foothillsforage.com) or [enviro@foothillsforage.com](mailto:enviro@foothillsforage.com)

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# BUILDING SOIL CARBON THROUGH REGENERATIVE AGRICULTURE

## SPEAKERS



**Dr. Kris Nichols**



**Kevin Elmy**

**Register by September 10 at**  
<https://buildingsoilcarbon.eventbrite.ca>

## LEARN PRACTICAL HANDS-ON SKILLS

Join Foothills Forage & Grazing Association and Grey Wood Forage Association for a workshop on Building Soil Carbon using Regenerative Agriculture. Speakers will focus on cocktail mixes & soil health, using soil health principals to build soil carbon on your farm or ranch, understanding soil sample results, practical application of various crops including perennial pasture for soil health and an insurance update from AFSC regarding drought & forage programs.

## TOUR DETAILS



September 14, 2021



9:30am to 3:30pm



Morning at Eagle Hill Community Centre & convoy to field location in the afternoon.



\$40 FFGA & GWFA Members, \$50 Non-members (plus GST). Includes lunch (if registered before deadline).





# Specialists Provide Advice On Early Weaning Calves

**If you're thinking about early weaning for the first time, specialists advise doing some advance planning, and talk with your veterinarian and a nutritionist about the appropriate programs.**

Sometimes weaning calves early can benefit both the pasture and cattle. Greg Lardy, North Dakota State University Animal Science Department head and professor, says early weaning can be an effective drought-management tool, as well as a way to save feed costs.

"Early weaning's big advantage is reducing lactation demands. A dry cow on drought-stressed forage has lower nutrient requirements. Early weaning can also help first-calf heifers, because two-year olds are still trying to grow. By weaning their calves early, nutrients are freed up for heifers to complete growth and have a healthy pregnancy," Lardy says.

Trey Patterson, chief operations officer for Padlock Ranch, Ranchester, WY, says they sometimes wean calves as early as four months old, mainly on first-calf heifers, but sometimes cows. "It can be a strategy to manage body condition," he explains, allowing females a chance to regain or not lose weight in the fall – especially in a dry year.

Of course, the big issue with early weaning is what to do with the calves, Lardy says. Do you have the facilities and feeds to manage them? Early-weaned calves, especially those under three months, have high nutrient requirements. The best bet, he says, is to consult with your veterinarian on a good health program.

Some people feed the calves while others just wean them on pasture. Calves 4-5 months of age transition better, as they're used to eating forage. Younger calves are trickier, but if you can meet the nutrient requirements of calves just 2-3 months old, they can be successfully weaned that young, Lardy adds.

"If markets are good, some people sell 350- to 400-lb. calves as lightweight stockers early in the season. Others have the facilities to feed those calves and sell them at the normal marketing time. Some

work with a feedlot and retain ownership," Lardy explains.

"When working with really lightweight calves, facilities built to handle 500- to 600-lb. calves weaned in October won't work as well for a 250-lb. calf weaned in June or July. Those calves can find a tiny hole in the fence. They may also have problems reaching over the bunk to eat, or a tank to drink. You may need to adjust the facilities," he explains.

"Most of the time, early-weaned calves transition just fine; in many cases, easier than older calves in November's cold, stormy weather. But it pays to work with animal health and nutrition professionals ahead of time to ensure you're not overlooking something," Lardy says.

Ron Gill, Texas A&M University Extension livestock specialist, thinks more producers in his area will consider early weaning this spring, because cows finished winter in poor shape.

"In Texas, there's more talk about early weaning this breeding season than last. Everyone was so behind last year; most producers didn't get to plan far enough out. They didn't realize conditions were going to get as bad as they did and were behind from the start," he says.

"People need to talk with their local dealer and ensure they can get adequate feed, which will be limited until after our next harvest. Some people may not be able to wean calves early just because they can't find the feed resources they'll need," Gill says.

## Summer issues

Early weaning, particularly in a drought, usually entails hot dry weather. Heat stress must be taken into account when weaning and handling calves, as well as working the cows, Lardy says. That might mean shade for the calves, and plenty of fresh water is also important. Since some calves haven't drunk from tanks or fountains, they need to learn how, he adds.

If you wean in summer, flies may be an issue. "If calves are penned, there are some control measures to reduce flies – whether it's fly tags or a spray application. Some feedlots also use parasitic

wasps to control flies that breed in manure. Flies are a stress you don't want," Lardy says.

Gill says last year was

a bad year for flies in Texas. Horn flies can be controlled with tags or pour-ons, but cattle in pens (such as early-weaned calves) were also bothered by stable flies and face flies – and pinkeye was sometimes a problem.

"Another issue in drought is dusty pens," Lardy says. "Find a way to manage dust because it's an irritant to eyes (opening the way for pinkeye) and to nasal cavity and airways (contributing to respiratory issues). If you can, water pens periodically to keep dust down."

## Behavioral issues

If you're early weaning, it helps to put cows and calves into a weaning pen or pasture a couple days ahead of time, so cows can show the calves where feed and water is, Lardy suggests. Some people use a trainer cow, or an older feeder calf, as a role model. The older animal teaches the young ones, and provides security in a leader/follower role.

When calves are weaned in pens, they circle the pen, trying to find a way out. "If the water source and feed bunks are located in the fence line, calves find them more readily," Lardy explains.

"And, if you have time, it pays to castrate, dehorn, brand, etc., at least a couple of weeks ahead of, or after, weaning. Otherwise, you can compound the stress of weaning and potentially set yourself up for additional problems," Lardy says.

## Feeding the calves

Starting young calves on fine, palatable, long-stem forage is best because they're likely more familiar with it. "You also need to get them transitioned onto energy-dense, nutritious feeds quickly, since they can't handle much volume of forage yet," Lardy says. He recommends top-dressing hay with the concentrate until calves start eating it.

"You might use a starter pellet from a commercial feed company or mix the diet yourself, but these calves need good-quality forage and nutritious concentrate to ensure they have adequate protein and energy levels and meet their vitamin/mineral requirements. Avoid low-quality hay, or hay with dust, mold or heat damage; these will lead to problems in early-weaned calves," he says.

In Texas, Gill says he's using the dairy model with some of the really young calves, feeding a complete feed for the first month and then gradually increasing the roughage portion of their

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# Working with Cattle, Working with People

## How to get along

### Workshop Focus

Good stockmanship means getting your cows to buy into your ideas in a low stress environment. Join Dylan Biggs to better understand cattle behaviour and how to apply low stress handling techniques on your farm/ranch. Included is a day and a half of classroom & hands-on, in-field sessions on cattle handling.

Good stockmanship is more than how we work with cattle; it's also about how we work with people on our team. As it turns out, effective herding dynamics is as applicable around the kitchen table as it is in the field.

In The Human Element segment of the workshop, David will apply the principles Dylan showcases through stockmanship to human relationships in the family, on the farm and with the general public.

Learn how to:

- Build trust and respect – the foundation of all relationships.
- Convince others to agree with your ideas.
- Create healthy relationships in a low stress environment.
- Constructively manage conflict and stress when things go wrong.
- Create calm, voluntary responses in your human relationships.

### Workshop Details

- **Dates:** October 4 & 5, 2021
- **Time:** 8:30am to 4:00pm both days
- **Location:** Classroom sessions are at the Stockmen's Library in the Cochrane RancheHouse (meet there on the first day). Field sessions are at Whiskey Ridge Cattle Co.
- **Ticket Price:** \$120.00 for FFGA Members, \$140.00 for Non-Members plus GST. Cost includes lunch on both days.

Register before September 30th at:  
[www.foothillsforage.com/events](http://www.foothillsforage.com/events)

### Meet the Presenters



**Dylan Biggs with TK Ranch - Low Stress Cattle Handling**



**David Irvine, the Leader's Navigator- The Human Element**





## **Foothills Forage & Grazing Association: Environmental & Communication Coordinator**

The **Foothills Forage & Grazing Association (FFGA)** is looking for a full-time, 15-month term Environmental & Communication Coordinator to cover a maternity leave. FFGA is a non-profit producer organization based out of High River. FFGA focuses on all aspects of forage and livestock production in south central Alberta through demonstration trials, newsletters, social media and extension events which includes workshops, seminars, conferences and tours.

This position offers the opportunity to develop and maintain FFGA's environmental and communication programs under the direction of the manager and board of directors. The successful candidate will interact closely with producers, researchers, extension specialists, industry, and educational institutes.

### **Job Description:**

- Lead FFGA's Communication Program including the monthly newsletter, website, social media, membership and promotions
- Manage, deliver and promote FFGA's Environmental Program including extension, Environmental Farm Plans and providing information on the Canadian Agriculture Partnership to primary producers
- Plan, advertise, execute and report on environmental demonstrations and events
- Actively pursue additional funding as applicable to environmental demonstrations and events
- Report to and work with the manager
- Field work as required including but not limited to, soil sampling for the Soil Health Benchmark Project

### **Qualifications and Skills:**

- Practical working knowledge of agriculture and environmental best management practices in western Canada
- Ability to use computers and related technology efficiently (specifically MS Office, Adobe Products (ex. Lightroom, Acrobat Pro), Wix, Eventbrite, video editing software and Canva
- Ability to communicate effectively in written, verbal and electronic formats
- Ability to work within timelines and meet deadlines
- Organized and reliable
- Motivated to excel both in a team environment and independently
- Valid driver's license with a clean abstract
- Environmental or agriculture science degree or diploma combined with experience will be given preference

Salary is based upon qualifications and experience. Personal health benefit package provided.

***Please submit a cover letter and resume to:***



Laura Gibney, Manager  
Foothills Forage & Grazing Association  
Email: [manager@foothillsforage.com](mailto:manager@foothillsforage.com)

**Application Deadline:** Wednesday Sept 22, 2021

**Start Date:** November 1, 2021

*We thank all applicants for their interest; however only those selected for interviews will be contacted.*



(Continued from page 9)  
diet.

Rumen volume in a three-month-old calf is much less than that of a six-month-old calf. Young calves need a denser diet. Patterson says they're very efficient feed converters and can eat more percent of body weight (dry-matter basis) than a bigger calf; they're also efficient at converting that to gain.

"When we wean a younger calf here at the Padlock Ranch, we provide a higher concentration of energy, protein and minerals and a little less roughage," Patterson explains. "Later-weaned calves can go right on grass and do well, but early-weaned light calves need a higher level of nutrition to keep growing and gaining."

Padlock Ranch weans calves in a feedlot facility with concrete pads and bunks; calves are fed a total-mixed, milled ration that contains hay and concentrate. The hay helps the calves adjust and keeps the rumen healthy.

"For rumen safety, we also use some fiber-based energy products – wheat midds and distillers grains, along with corn or barley, to get energy levels up without having a diet too high in starch," Patterson says. Wheat-mid pellets are very palatable and calves start eating those fairly quickly in a mixed ration. The more stressed they are and the lower their feed intake, the higher the nutrient concentration necessary; every bite needs to be nutritious, he adds.

"On lighter calves, we don't use a wet ration like silage or haylage. After they

get a little more size, over 400-450 lbs., we start working more silage into their diet and they can be managed like older-weaned calves," Patterson says.

"With bigger calves, if you feed a wetter ration, they just eat more. But small calves don't have enough rumen space to eat enough to get adequate nutrients to meet their requirements for growth," Patterson explains.

#### **Sidebar: Early weaning stretches forage**

Weaning calves early can take pressure off forage supplies, specialists say.

"People I've worked with who wean early tell me they notice a difference in the pastures when grazing dry cows rather than pairs. This helps pasture recovery in the following year, as well," says Greg Lardy, North Dakota State University (NDSU) Animal Science Department head and professor.

Trey Patterson, of the Padlock Ranch in Ranchester, WY, did some research while on faculty at South Dakota State University (SDSU), teaming up with range scientists from SDSU and NDSU. He says that, comparing spring-calving cows weaning in August with cows weaning in November, they found that the dry cow from August through November used 76% the amount of forage that the cow-calf pair did.

"When we early-weaned, we saved 24% of forage that otherwise would have been used during that time. Early weaning can help when trying to manage body condition score on cows and/or forage

use.

"If it's a forage-availability question, calculate whether you're ahead to leave the calf on the cow (assuming body condition score is adequate) and feed the cow more during the extra time she's lactating, or cheaper to wean the calf and feed it, and not have to feed the cow as soon or as much," he explains.

#### **Sidebar: Vaccination points**

Thinking about early weaning? Greg Lardy, North Dakota State University Animal Science Department head and professor, says to look to your veterinarian for advice on health products and timing.

"In a really early-weaning situation, you're still close enough to birth that you could run into interference problems when vaccinating, because the calf still has maternal antibodies from the colostrum," he says. Vaccination decisions must be made on a case-by-case basis, depending on the herd, age of the calves, etc.

Often, really young calves are easier to manage health-wise than some of the 500-lb. calves being weaned, adds Ron Gill, Texas A&M University Extension beef cattle specialist. "Passive immunity is still strong in young calves, whereas immunity in five-weight calves is waning. The health on small calves is usually pretty good, unless you stress them a lot in the weaning process," he says.

*Author: Heather Smith Thomas.  
Original article can be found at  
[https://www.beefmagazine.com/  
calving/specialists-provide-advice-  
early-weaning-calves](https://www.beefmagazine.com/calving/specialists-provide-advice-early-weaning-calves)*

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**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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