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# GRASSROOTS NEWS & VIEWS JULY 2021

## Treasurer's Note - Justin Blades

### Howdy folks!

First let me thank everyone for taking the time to follow FFGA on our various platforms. We are excited to announce that we can now start hosting in person field days and tours. I am excited that the Gabe Brown & Dr. Allen Williams Soil Health Academy will finally happen in 2022. Also, please have a look at the Grazing Management tour to be held at Jerry Baerg's near Linden on July 14th (page 4).

There is a saying that "rain makes everyone look like a good farmer". Unfortunately that is not the case for most of southern Alberta. As I write this, it is currently over 35C and the forecast is to be very hot for the rest of the week. These challenging times of drought separate the good forage managers from the rest. Every operation should have a drought management plan. In my experience, the sooner you implement your plan the less drastic the measures needed to compensate for the lack of forage growth. The low return on investment in our industry has forced many of us to graze at or near maximum capacity. These drought years can cause irreversible damage to our pastures if we do not decrease overall stocking rates to match forage growth. I encourage everyone to consider an early drought management plan implementation, so that the severity of our actions and range health degradation is tolerable.

As we hope for more rain it brings to light how important clean pure water is to our agricultural industry. Not only is it important for forage and crop production but also for animal health and welfare. In my opinion water is

the element that is the limiting factor to population maximums, be it people or livestock. It also is the limiting factor for how well you can manage livestock distribution. I look at all the opportunity there is to take advantage of some underutilized forage that is just too far from water. I know that our cows are not too far from the water trough in this 30 degree weather. Jerry is going to show us his watering system on the Grazing Management tour July 14th. Perhaps you will see something he is doing that may work to make your management better suited to take advantage of the resources you manage, or maybe you will learn of a different solution from a conversation you have with another progressive FFGA member on the tour. The information sharing of common issues that occur from like-minded people that attend these events is the reason I am involved with FFGA. I hope you find value in this membership as well.

Happy grazing,

*Justin Blades*

*Moving cattle to forestry on Rocking P Ranch this spring.*



### IN THIS ISSUE

|  |       |
|--|-------|
| Drought Management Plan for Your Cow/Calf Enterprise | 2 & 5 |
| Maintaining quality of cut hay                       | 3     |
| Five benefits of creep feeding calves                | 6     |

# Drought Management Plan for Your Cow/Calf Enterprise



Photo: Pixabay

Drought seems to happen somewhere every year. The key to getting a cow/calf enterprise through drought conditions is to have a management plan. Drought forces forage/livestock producers to develop strategies that deal with indirect economic and biological effects of animals for the available feed resources as well as direct effects of reduced water supply for plants and animals. Trying to feed the whole herd through a drought with purchased feeds can be financial suicide, especially if drought conditions last over more than one growing season. Many strategies can be used to reduce forage demand. Drought management strategies can be subdivided into three categories: livestock inventory; use of existing forage resources; and alternative feeding programs.

## Adjusting Livestock Inventory

Adjusting livestock inventory to reduce and balance total forage required with available forage supply usually is the most economical alternative. Individual production records come in handy to identify low producing females. Cull late calving cows, older cows, and less productive cows. Cull early to avoid selling when prices are low because everyone else is selling. Consider culling females that are in the bottom 15% to 20% of production for two to three

years in succession. These females may be telling you that they don't "fit" for some reason. If there is a time when individual records are valuable in management decisions, this is one. Depopulation is the initial step in adjusting livestock inventory to forage availability.

Typically drought is not a wide-spread climatic condition. It may be economical to secure pasture in another part of the state or in a surrounding state. If this is an option, make sure all parties understand the terms of the pasture lease and who monitors the cattle and checks water and puts out mineral. If there are cows that are relocated and a portion that remain at the "home" place, have a biosecurity plan for when the relocated cattle return. The plan should include not co-mingling the cows for a period of time after they return. Consult your veterinarian to help in designing a plan.

Remove yearlings from pasture early and sell or drylot. One of the advantages of having a yearling enterprise along with a cow/calf enterprise is if pasture becomes limited, yearlings can be sold or moved to the feedlot and the calf making factory can be kept intact.

Usually in drought conditions, early weaning calves are more effective than creep feeding. Lactational pressure is not removed from the dam when calves are creep-fed. Data from the University of Illinois indicates early-weaned calves are efficient at converting feed to calf gain. If calves are early weaned, consider retaining them to take advantage of the efficient gain. Another reason to consider retaining early-weaned calves is they are light at weaning and, if sold right off the cow, usually don't generate enough dollars to cover annual cow costs. There is

a body of data that indicates that early weaned calves exposed to high energy diets soon after weaning have a high propensity to grade USDA Choice (Canada AAA) or higher. Know your annual cow/calf enterprise production costs and determine when calves should be marketed for the greatest potential profit. With the current prices of light-weight calves, this must be thought through carefully. Finally, data would suggest that for every 2.5 days that a calf is weaned from the dam, there is one more day of grazing available for the cow. Data collected at the University of Nebraska indicate that 250 to 350 pound calves will consume about 5 pounds of grass daily on a dry matter basis. There is also a saving in forage intake between a lactating and nonlactating female. Bred cows can get by on minimal forage if not suckling calves.

Consider not keeping or keeping fewer replacement heifers. It may be more economical to retain young, healthy, open cows instead of heifers. When considering this management strategy, make certain that the nonpregnant cows that are being considered were not pregnant because of a disease problem. Consult your veterinarian to assure that there is not a health concern. Biosecurity at the ranch is important. Heifers require high quality feeds and forages and this expense is costly without a calf for income. In addition, first-calf-cows will wean the lightest calves and at a time when an operation is managing through drought conditions by reducing cow numbers, having more running age cows will result in the greatest pounds of calf weaned.

## Use of Existing Forages

Use existing forage resources efficient-

(Continued on page 5)

On the Cover: Branding season. Photo by Lee Gunderson

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# Maintaining quality of cut hay

The hay is cut. Is it to be made into chopped / round bale silage or into dry hay? There are advantages and disadvantages of each system and associated costs. How the hay is baled and stored will also impact overall quality. This article discusses some of the factors to consider.

Chopped haylage or silage removes most of the uncertainty caused by weather because the crop is harvested within a couple days. Moisture content for chopped silage should be 60 to 65% and 45 to 55% for round bale silage. With limited time in the swath, dry matter losses caused by respiration are lower than for dry hay. Leaf loss is generally reduced to 10% compared to 25% with dry hay. This results in higher quality feed with higher amounts of soluble sugars and protein in the silage or haylage compared to dry hay. With lower leaf loss, yield per acre can be 5 to 10% higher than for dry hay. Also, protein and TDN can 1 – 3% and 2 – 4% higher respectfully.

With any type of silage, excluding oxygen (air) from the pit, pile, tube or wrapped bale to minimize aerobic bacteria growth is key to having a high-quality end product. Cover the pile or pit as soon as possible. At the end of the day, cover the portion of the pile or pit that is completed. Do not wait until all the silage is harvested. Bales need to be wrapped or placed into a tube within 12 hours of being made. Again, minimizing exposure to air is key. Cover with a minimum of 6 ml plastic for pits and piles, or multiple layers of plastic to obtain a 6 ml thickness for wrapped bales.

The safe moisture content for making dry hay depending on the size and type of bale. Large square bales are very dense and therefore moisture content above 12% can result in mold forming in the bale. Large hard core large round bales are less dense than the large squares, and large soft-core bales are less dense than the hard-core bales. Moisture content can be as high as 16 to 17% in the soft-core bales. The critical factor is that the hay must be cured before baling. This occurs when the moisture within the stem has evaporated and can take 5 to 8 days depending on weather conditions, crop yield, and field moisture.

Yield and quality losses occur when hay is cut, raked, baled and during storage. Cutting can result in a 2% yield loss.

There is a 5% yield loss each time hay is turned. Baling losses increase in proportion to the time it takes to make a bale. A 12 foot windrow can have a 14% yield (shattering) loss. When 3 windrows are combined prior to baling, losses are reduced to 5%. It is the leaves and flowers that are lost. The parts of the plant that have the highest quality. Weather damage further reduces yield. One inch of rain on hay in the swath causes a 11.7% reduction in yield. It also reduces the digestibility of the hay by 6%.

Storing hay outdoors without any protection from the weather creates many problems. Dry matter losses due to shrink can be as high as 15 over the first winter. Bales made with sisal twine has double the loss than plastic twine (19 vs. 10%). Bales made with net wrap has a 7% loss compared to bales made with plastic twine. Having the net wrap cover the shoulder of the bale and 3 to 6 inches of the flat side of the bale helps to shed rain and reduces the losses to 4%. Wrapping dry hay in plastic or storing under a shed reduces shrink to 2%.

There are times when white mold is found in the silage or haylage or dry hay. This is caused by dirt contamination. Either the cutting bar or the pickup on the baler or silage cutter was set too low and this introduced dirt into the swath. Adjust the equipment so this does not occur.

## Stacking does make a difference

Preventing moisture from migrating into the bales from rain or melting snow reduces bacteria, mold and fungi growth which reduces damage. Three common methods of stacking hay are compared.

The pyramid stack creates the most damage. Moisture that runs down off the top bale migrates into the middle and bottom rows. Damage occurs where the bales touch.

The mushroom stack results in less damage than the pyramid style. Moisture that runs off the top bale migrates into the upper end of the bottom bale creating damage. Increased soil to bale contact allows more moisture to enter the bottom of the lower bale.

Individual bales stacked in a row with 4 to 6 inches space between the bales results in the least amount of damage. Any rain that falls or snow that melt can run off the bale surface minimizing dam-

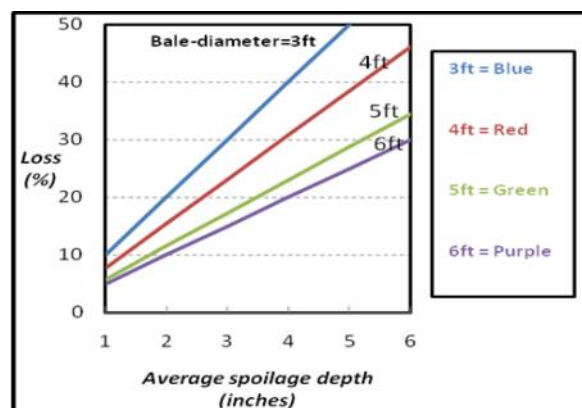
age.

Hard core bales with a high density (made tight) are able to shed water better than soft core bales or bales with lower density.

It may appear to the eye that three or four inches of damaged hay in a 5 foot bale is not significant. Work done by Buckmaster (1993) found that 3 inches of spoilage impacts 17% of the hay and 4 inches impacts 22% of the bale.

Improving the physical characteristics of a bale and reducing weathering damage to stored hay can reduce bale shrink, quality loss and the overall cost of feeding the cow herd over winter.

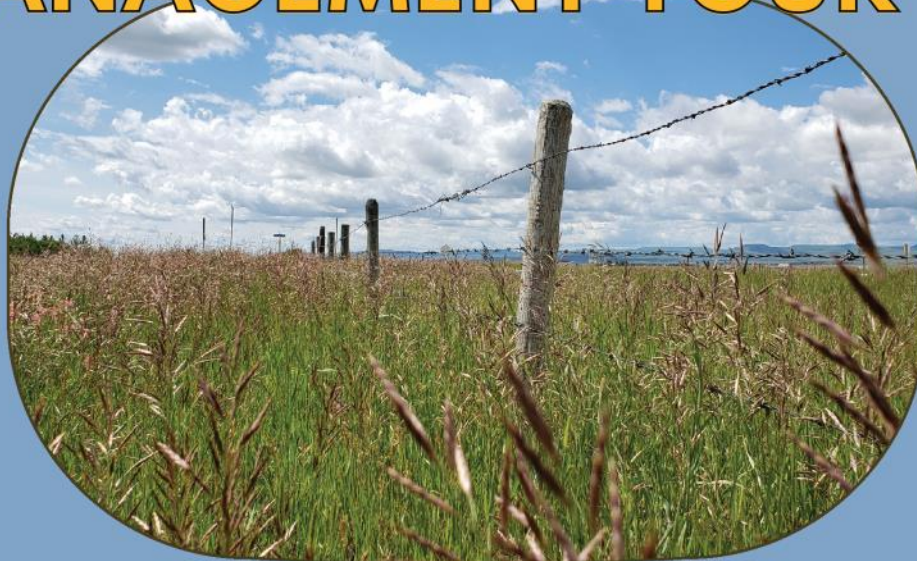
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**FOOTHILLS FORAGE  
AND GRAZING ASSOCIATION PRESENTS:**

# GRAZING MANAGEMENT TOUR



**We're back and excited to bring you our first Summer Grazing Tour of 2021!**

## **Agenda:**

- Jim Bauer - Grazing Management
- Jason Williams - Electric fencing
- Jerry Baerg - Tour host & grazing strategies (inc. watering systems)
- Graydon Garner - Ducks Unlimited Funding Programs
- Producer Panel - Grazing Annuals (including commodity crop grazing strategies, swath grazing & more)

## **Details:**

- July 14th, 2021
- Meet at Ribboncreek Ranch (see Eventbrite for Directions) & Swalwell Community Hall
- Cost - \$20.00/FFGA Member, \$25.00/Non-member + GST (includes lunch)
- Registration - 8:50am in the field, the day will end around 3:00pm

We will spend the morning outside touring Ribboncreek Ranch and the afternoon will be spent in the Hall. Dress for the weather.

**REGISTER BEFORE JULY 9TH AT: [HTTPS://GRAZINGMANAGEMENT.EVENTBRITE.CA](https://grazingmanagement.eventbrite.ca)**

**IF YOU HAVE QUESTIONS OR NEED HELP REGISTERING CALL 403.700.7406**



**DATAMARS**





(Continued from page 2)

ly. It seems that the greatest benefit of cross-fencing pastures and having a rotational grazing system occurs when managing through drought conditions.

Grazing systems don't have to be extensive, but allowing pastures to have a rest period in drought condition aids grass persistence. In addition, if carrying capacity is lowered during drought, improved grazing management minimizes the impact of drought on grasses.

Consider some of the following grazing management techniques during drought.

- Delay turn-out to permanent pastures by feeding carryover hay or by grazing meadows, early alfalfa growth, or winter cereal grain pastures. A 1- to 2-week delay in turn-out can increase forage production 10 percent or more when soil moisture is limited. When considering this option, consider the trade-off between forage quality and forage yield.
- You could also flip this management consideration and graze the grass early knowing there is a reduction in yield and keep the hay to feed later.
- Construct temporary cross-fences within larger pastures to concentrate grazing. This encourages cattle to more completely use whatever forage available and defers grazing on the other pastures, allowing them to accumulate more growth before being grazed. Be sure to provide enough time for adequate plant recovery before grazing the pasture again.
- Skim or flash graze each pasture very briefly with a high concentration of livestock early in the grazing season to use plants that otherwise would become mature and left ungrazed if grazing is delayed. Typical examples include sedges, cheatgrass and downy brome, bluegrass, and early forbs.
- Temporary electric fencing and hauling water may be needed to control when and where cattle graze certain areas. Be especially cautious of poisonous plants as well as nitrates, prussic acid, and grass tetany. Some plants that are not normally consumed may poison livestock when forage supply is low.
- Avoid overgrazing rangeland, otherwise recovery following drought will be slow and production depressed for an extended time.
- Time grazing in pastures with ques-

tionable water supply or quality early in the grazing season when water demand by cattle will be less.

### **Alternate Feeding Opportunities**

Additional forage supplies can be developed. These options, though, must be chosen with great care because they may be expensive relative to other alternatives, such as de-stocking or relocating cows. Following are some forage feeding opportunities. Cut winter wheat for hay instead of grain, especially if low grain yields are expected and price is low. Oats could be planted as early as possible for grazing or for hay. Oats use spring moisture very efficiently to produce forage. Use alfalfa for pasture instead of hay. In this situation, other winter feed supplies will be needed. Protect cattle from bloat. Consider green-chopped alfalfa or hay meadows and feed daily instead of grazing or harvesting as hay. This minimizes losses and stretches feed supply to its maximum, but it can be expensive. Plant summer annual forage grasses like sudan-grass and millets. These plants are drought resistant but will need some summer moisture for economical growth. Always test summer annuals for nitrates. If nitrates are high, mix with low nitrate feeds and adapt cows. Graze corn, especially dryland corn with depressed yields. Corn provides high carrying capacity and quality for a "salvage" operation, but cross-fence and introduce cattle slowly to avoid digestive problems.

If there is grass still available in the pasture, then supplementation with grain such as corn is not recommended to extend the pasture. Supplementing corn will actually reduce forage digestibility. Also, supplementation with a protein cube will not reduce forage intake, actually it will increase forage intake and therefore not extend the pasture. Because of the dry conditions, grasses tend to produce a seed-head earlier than usual; quality is likely lower than anticipated. To extend existing pasture, feeding alfalfa hay because it provides some protein and energy, but also fills the rumen and reduces pasture intake. Basically, alfalfa is being substituted for pasture. If pasture is available and you want to extend the pasture, feed 4 to 6 pounds of alfalfa per head per day. Alfalfa could be fed three times a week to save on fuel and labor. Grain co-products are feeds to consider when trying to extend existing pasture. Grain co-products do not reduce digestibility of forages, so feeding them in a diet that is primarily forage will not have any negative associative effects. There is re-

search being conducted at the University of Nebraska evaluating the use of grain co-products mixed with low quality forages as a feed to extend existing pasture in cattle grazing situations.

Dry-lotting cows may be an option in drought conditions. Distillers grains and corn are high in energy feeds and diets that have these feeds in them will not need to be fed to the animals' full daily intake while still meeting their nutrient needs. It is important when feeding limit-fed high-energy rations that there is plenty of bunk space (28 to 36 inches per head of bunk space) so boss cows don't get more than their share and the timid, young cows get thin. Having plenty of bunk space when limit feeding high grain diet will help manage around the possibility of subacute acidosis if one or more cows eat more than their share of a high grain diet. The concentrate part of the ration will supply the energy and protein needs and the forage, medium to low quality forage is used so that rumen health is not compromised. Consider including a supplement that contains an ionophore. An ionophore will help reduce the occurrence of subacute acidosis and increase efficiency of use of the ration by the cows. Because these rations supply all the nutrients, they need to be fed daily. For the first week, consider feeding 50% of the ration in the morning and 50% of the ration in the evening. After a week, it is probably more economical to feed the ration once a day. Because cows are not fed to capacity, they will seem hungry, but should adapt in about 10 to 14 days. Lots or exercise pastures will need to have good fences. If straw or cornstalk bales are available and they are inexpensive, consider letting cows have access to these forages as filler to the main diet if cows have trouble adapting to limit-fed diets. In this feeding situation, it may be best to early wean the calf.

Have a management plan and be prepared to implement it when a drought occurs. There are economical options to keep the productive cows in the herd. Records will be critical in drought situations, both from a cow culling and pasture management standpoint. Be creative in designing feeding alternatives.

*Author: Dr. Rick Rasby, Professor of Animal Science, Animal Science, University of Nebraska-Lincoln, Lincoln, NE. Original article can be found at <https://beef.unl.edu/cattleproduction/managementplan>*

# Five benefits of creep feeding calves



Stock photo: Pixabay

*Always an ROI, some years better than others*

Over the years, I have discovered that there are three types of beef producers who are creep feeding spring calves.

1. Those who don't creep feed.
2. Those who sometimes creep feed if it makes economic sense, and
3. Producers who routinely creep feed as a matter of course.

Although, I have heard almost-convincing arguments from the first two groups, I tend to take sides with the last on the list, because there are five solid benefits to creep feeding spring calves every year.

These benefits dispel the notion that as long as the cows are milking well or pastures are lush, producers don't have to creep feed.

At the beginning of the pasture season, I often witnessed spring calves engorged with milk as their dams ate succulent grasses. However, my attitude quickly changed when lots of university studies demonstrated that by mid- to late summer, the nursing cow's milk production is in steady decline and meets only about 50 per cent of the growing calves' nutrient requirements. Supplemental nutrition provided on pasture is the only way to close this "hunger gap" and help baby calves meet all their nutrient requirements.

These five good reasons also dispel the second belief that direct profitability of creep feeding calves is necessary. While I still recommend producers take a hard look at economics, they also need to look at the total profitability of putting more saleable weight on spring calves during the summer as well as the ROI (return on investment).

## Look at return on investment

For example, for the last 10 years I have tracked the direct total return (\$) per calf and ROI to put 60 pounds of creep-feed weight on calves by the end of a 100-day creep feeding program. As a result (see chart), each year showed a profit per calf or positive ROI; the lowest being 2013 due to lower autumn calf prices relative to grain prices, while 2015 was a pinnacle year of \$85

profit per weaned calf or 142 per cent ROI on a reverse situation.

For 2020, the profitability of creep feeding spring calves is nominal with lower predicted feeder prices and relatively stable grain prices. Yet this should not dissuade anybody from creep feeding calves, because as I advocate, the following five benefits of creep feeding calves, remain the same: Weaning weights are increased. Producers can average 30-80 pounds per calf of added gain with creep feeding, particularly on large-frame, good-quality steers with a lot of growth potential.

Efficient gains are achieved. Good-framed and quality steers are masters of turning high-quality and palatable creep feed into lean body tissue. Calves weighing less than 500 pounds can convert good-quality creep at the rate of six pounds eaten into one pound of gain.

Not so dependent on cow. I know of a few producers that put their creep feeder out as early as possible in the grazing season. As a result, they have witnessed that weaning weights tend to be higher by 20 pounds with steady feed efficiencies of six to seven pounds of feed per pound of gain.

More uniform weaned calves. Creep feed tends to even out the nutrition received by all calves within a cow herd and produce similar weaning weights by fall. That's because, some cows are not producing as much milk as compared to others, such as first calf heifers compared to older brood cows.

Less weaning stress. A friend weans about 300 calves every fall.

She finds that her crept-fed calves cry out for a day or so, but quickly forget about mum. These weaned calves are also bunk-broke and tend to go onto a 45-day backgrounder-feeding program sooner.

I believe these benefits support the argument that most cow-calf producers should creep feed calves. Even in 2020, when its direct profitability might be breakeven dollars, producers should still put their creep feeders onto pasture, so they can count better profits from these benefits all on one hand.

*Author: Peter Vetti. Original article can be found at <https://www.grainews.ca/cattlemans-corner/five-benefits-of-creep-feeding-calves/>*

## Economics of Creep Feeding

| Year | Return \$ per calf | ROI (%) |
|------|--------------------|---------|
| 2020 | 6.60               | 9.6     |
| 2019 | 23.00              | 25      |
| 2018 | 21.24              | 21      |
| 2017 | 28.70              | 47      |
| 2016 | 25.53              | 45      |
| 2015 | 84.60              | 142     |
| 2014 | 53.40              | 93      |
| 2013 | 9.00               | 17      |
| 2012 | 10.80              | 18      |
| 2011 | -3.60              | -6      |

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OPPORTUNITIES | JULY 20, 2021 AT 9:00 - 10:00 AM

Presentation will be recorded and available at a later date

### INTERPRETING AND APPLYING STOCKING RATES ON

RANGELANDS | JULY 22, 2021 AT 9:00 - 10:00 AM

Presentation will be recorded and available at a later date

### WEED ECOLOGY, CONTROL, AND SPECIES OF CONCERN IN

ALBERTA | JULY 27, 2021 AT 9:00 - 10:00 AM

Presentation will be recorded and available at a later date

### PRODUCER PERSPECTIVES | JULY 29, 2021 AT 9:00 - 10:00 AM

Presentation will be live and available only at this time (not recorded)

Costs: \$25.00/person or household

Register at: <https://bit.ly/3fngwrQ>

*Attend the live presentations to be able to participate in the Q & A sessions and for a chance to win a door prize*

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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.

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