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## Vice Chairman's Note

One year, just one year, but what a difference one year can make.

Areas that suffered drought last year that prevented them from growing hay were inundated this year making it almost impossible to put up hay. Bales put up without rain this year are truly the exception not the rule.

Last year at this time (September) calves were selling for unprecedented record prices. Calves selling in September this year are seeing a negative price difference of up to 45%. Taking a 5 year average we still have historically high calf prices but it is definitely a volatile market.

The message for all of us is to learn to innovate in order to ride that wave of volatility and strive to enable our operations to absorb occasional body blows from outside sources beyond our control.

An example might be the upcoming carbon tax and the uncertainty it brings to an industry like agriculture. Generally speaking, agriculture lacks the ability to recover the cost burden the tax may bring.

"If you do what you've always done, you will get what you've

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always got!" This is probably not good enough anymore. It is why I value my membership in the Foothills Forage and Grazing Association.

This past summer FFGA brought in guest experts to challenge our notions and paradigms regarding soil, grass and economics.

First up was soil scientist Nicole Masters of Integrity Soils New Zealand. Nicole gave us an opportunity to learn more about the community of micro organisms that exist beneath the surface and support all life above the surface. In addition we learned how our actions on the surface affect the health of those organisms and thus the health of our soil and an effective water cycle, filtration and retention.

In August FFGA hosted grazing guru Jim Gerrish at the Longview Hall for a three day grazing school. For those fortunate enough to attend, Jim covered grazing rotations, stocking rates, pasture evaluations, economics and much more. It was thought provoking to say the least and I believe everyone left with a better understanding of the task at hand to better utilize their forage at home.



FFGA has a Fall Pasture Tour on cocktail mixes, high sugar feed, and off-site waterers. We also have engaged Nicole Masters for a two day advanced soils school in November and Jim Gerrish will return in June of 2017.

If you are interested in attending these events I encourage you to contact Laura or Rachel at the FFGA office as spots will fill quickly for both.

We have now passed the fall equinox and forage production has begun shutting down for winter.

Here at home we are going to try swath grazing a cocktail mix of oats, peas, crimson clover, hairy vetch, forage turnips, tillage radish, Italian ryegrass and sorghum/sudan grass (See Page 1).

In fact, tomorrow's job will be stringing out the electric fence mainlines that I hope to use to meter out the feed to the cows. I haven't tried this before so I am expecting some growing pains.

I do however know that there are experienced people in the FFGA group I can call upon for advice when things go astray.

That is the beauty of FFGA membership. The contacts you make can be invaluable as most are very open to exchanging ideas. As our

membership expands so to does our body of knowledge.

New people bring new energy and insight.

Check out the newsletter for coming events, come join us and bring your neighbour and an open mind.

Best of luck with the remaining harvest and fall calf sales.

Happy trails,

Andy Hart

#### FFGA MISSION & VISION STATEMENTS

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

<u>Vision:</u> 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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## Put Weight and Condition on Cows Now By Grazing Crop Aftermath

Fall is the time to take advantage of the gift of crop aftermath grazing. Why a gift? Well, generally, all you need to do is open a few gates and let cows gain weight grazing crop aftermath.

If the bull was turned out June 1, the second trimester of the cows' pregnancy starts early to mid-September and the third trimester starts Dec. 12. Thus, the last week in September starts a positive opportunity to position the cows for calving and rebreeding next year.

Plus, now is the time to evaluate the plans for winter. Feed inventory, cattle inventory, pasture usage and prepping calves for weaning are all on fall pastures. These pastures will put the table. September started a window of nutritional change for cow herds that had an early June bull turnout. Nice fall weather, much like we currently enjoy, tends to downplay the nutritional needs, but let's not forget them because more than 70 percent of the costs of a typical cow will be in feed.

Weight gain is difficult for a cow once she enters the last third of gestation, when the ever-growing calf and cold winter nights take a toll. We want the cows to be in good condition at calving next spring and even better condition at breeding next summer. So when do we put weight on the cow? Well, the middle three months of gestation, or pregnancy, would work. Cow milk production is decreasing, weather is favorable and fall feedstuffs generally are readily available. Crop aftermath is bountiful across the country.

When I drive by fields that are not fenced nor have access to water, I always ponder about how much a cow would enjoy that field. For example, a moderately milking 1,300-pound cow would like to eat her fill of good, green grass prior to weaning. In reality, she will try to eat all that she can to milk. After weaning, that same cow keeps eating if feed is available.

When a cow eats above her requirements, she gains weight. In this case, replacing the weight she lost raising her calf, along with adding more body condition (commonly called fat) in preparation for winter, is the hoped-for scenario.

Because the third trimester of the cow's current pregnancy has not been reached, milk production ceases at weaning, and good weather provides the opportunity to utilize cheaper feed resources. Essentially, the cow will eat in excess of her requirements in the crop aftermath buffet.

A good management option is to sort the thinner cows and send the best to the needed feed in front of the thinner cows, and the cows will improve their body condition score.

In the meantime, the moderate- to heavier-conditioned cows can be grazing areas that are less lush. However, most ranchers will let all their cows enjoy fall aftermath grazing, keeping life simple. All the cows should respond with increased conditioning and be better prepared for winter and next year's calving. Also keep in mind this very generic approach to ration balancing: If you do not have some mix of green and yellow in the ration or daily feed intake while grazing, more than likely the ration is unbalanced. Take a look. More green is not the problem, but more yellow and brown means this is the time to involve your local nutritionist to develop a proper supplement.

Because not all producers turn their bulls out on June 1. let's review the dates of the second trimester for some common bull turnout dates: If the bull went out May 1, early August starts the second trimester and benefit is worth it. Nov. 9 starts the last third of gestation.

If the bull went out July 1, early October starts the second



trimester and Jan. 11 starts the last third of gestation.

If the bull went out Aug. 1, early November starts the second trimester and Feb. 12 starts the last third of gestation.

If the bull went out Sept. 1, early December starts the second trimester and March 12 starts the last third of gestation.

These dates are critical to managing the cow herd's nutrition and controlling costs. Visit with your local nutritionist and put together a balanced nutrition program to give your cows the best opportunity for a trouble-free calving season next year and a breeding program that puts 70plus percent of your calves in the first 21 days of breeding.

Yes, fall grazing can be the gift that can make a real difference in the productivity level of the herd. The challenge for many producers is the business of getting ready for winter. The fall weeks slip by, and all of sudden the third trimester is here and we still are catching up. Take the time, fix some fence, visit with the neighbors and seek some crop aftermath for grazing.

Granted, the opportunity may not be available for everyone, but if it is in reach, reach out and see what you can do. The cows will enjoy it and the

By: Kris Ringwall, Beef Specialist

Source: www.cattlenetwork.com/

## Frost Seeding—A Cheaper Alternative?



Photo Credit: Angelrose Dairy

Legumes are also able to "fix nitrogen" from the air. As their roots rot back naturally they "share" this nitrogen with the surrounding grasses. Nutrient requirements of a legume grass stand are much lower than for a pure grass stand because of this "free" nitrogen.

#### Introduction

Frost seeding is an economical method of improving pasture and hay fields by broadcasting the seed on frozen ground. As the ground freezes and thaws, it opens and closes allowing the seed to be incorporated into the soil. This keeps the seed from germinating until there is a good moisture supply early in the spring. Legumes are the most successful for this system as they tend to be rounded, dense and most importantly, they germinate at lower temperatures so will begin growth early in the spring. Grasses have not been as successful as they are lighter coloured, less dense thus they sit on top of the ground and wait for warmer temperatures to begin growth. This often coincides with drier weather as well.

The ideal candidate for frost seeding is a pasture field that is "run out". If you walk across the field and can see bare soil the size of a loonie, then these spots will be good frost seeding sites. A field can be made ready for frost seeding by overgrazing in the fall to weaken the existing plant growth in the spring. This is not necessary but can be helpful in allowing the seeds to make good soil contact.

#### **Benefits of Adding a Legume**

The addition of legumes to a pasture or hayfield benefits the forage in many ways. The legume is higher in protein and energy at all stages of growth than the existing grasses, so the addition improves the quality of the forage.

As we work pasture fields harder, using rotational grazing to keep them vegetative, we are finding that legumes such as trefoil are not long lived perennials but rather live 3 - 4 years and reseed easily. If we do not allow them to go to seed, they will thin out of the pasture. It is more economical to frost seed every 3 - 4 years than to set aside a portion of the pasture to allow it to go to seed unless land costs are extremely low. Frost seeding can help to limit the density of makes it a very attractive alternative legumes such as clovers if they are frost seeded rather than seeded with the original mix. This along with good grazing management will help with bloat control.

Alfalfa will frost seed as well as any other legume, but alfalfa has an autotoxicity which will not allow new alfalfa seed to grow in the presence of a mature alfalfa plant. You will only have one chance to get a successful stand if you are frost seeding into a pure grass stand. For this reason, alfalfa is usually seeded conventionally or no-tilled to produce more consistent results.

#### **Equipment Considerations**

You have the choices of conventional reseeding no-tilling, fertilizing or frost seeding forage fields to improve their production. Your goals for the field and the condition of the stand will determine which is best. In hay fields, we generally want an alfalfa grass stand so conventional reseeding or notilling, after killing the original stand, are the most effective.

Alfalfa stands can be patched by frost seeding red clover into the stand to get one more production year, but this is usually done in the spring when winterkill reduces hay supplies. Fertilizing, can double or triple the production from an existing stand, but keep in mind that it could also do this with a more productive species that you have introduced. If you have an adequate grass stand in a pasture field, then adding a legume by frost seeding will not only add a high quality plant to the stand but will also help to provide nitrogen to the grasses, improving their growth as well.

Frost seeding requires very little equipment. It is often done using an all terrain vehicle (ATV), snowmobile, tractor and spreader or with a hand-held broadcaster. Many custom operators provide these services. Cost per acre is low. This for someone who wants to improve a pasture with very low input costs. It also has the added advantage that the pasture will be useable the summer following as there is no need to remove the livestock completely.

#### **Frost Seeding Guidelines**

#### Time of Seeding

The ideal time to frost seed is in the very early spring. The ground should freeze and thaw 2 - 3 times after the seed is broadcast. Another good time is December\*, after all the growth has stopped for the year. This is an excellent time for areas which normally receive good snow cover and do not experience prolonged January thaws when the seeds could germinate. Too many times fields go from snowbanks to mud in the spring so there is no time to frost seed. Do consider December seeding,. A light skiff of snow will help to show where you have seeded. Tractors with a spinner spreader can often be used at this time, making the job faster and a smoother ride.

## Frost Seeding—A Cheaper Alternative?

#### **Species Selection**

Bird's foot trefoil is generally used for frost seeding as it is a non-bloating legume that established relatively well Fertilizing (Ontario). A seeding rate of 5 kg/ha is adequate. The clovers are more aggressive in establishment but do introduce a bloat concern.

If you manage your grasses to keep them young and vegetative, this can be reduced. Seeding rates of 1-2 kg/ha are adequate for clovers as they have many seeds per kilogram.

Legumes are about 50-60% effective in establishment and grasses about 20-30% effective when frost seeded. This really means one year of excellent catches, one year of no results, and two years somewhere in between.

You will need patience and perseverance when frost seeding.

The cost is 25-30% of conventional or no-till seeding so you can afford to frost seed 2 - 3 times to get an acceptable stand.

then you should consider other

alternatives. Weather in the spring will determine how successful the frost seeding will be.

Phosphorus does favour new seedling but in a frost seeding situation, where there is so much existing, competition, fertilizing the field will give the advantage to the existing plants. A late summer application of phosphorus and potash would strengthen the root systems of the legumes for the winter.

#### **Grazing Management**

An early summer grazing can help reduce the competition from existing grasses. If a rotational system is being used. limit the time that the livestock have access to the frost seeded area. Often, in continuous -grazing situations, livestock have overgrazed the area and killed the legume. Watch their habits to see if this is the problem and try to alter their behavior. A minimum of four paddocks will help you to control grazing patterns, which will allow If you do not find this wait acceptable, rebuilding of root reserves between

grazing periods. The legumes can then establish and be more productive.

Frost seeding is a popular method of improving long term pastures or patching hayfields for one more year of production. It is a cheap but high risk option. Many people will frost seed 25% of their acreage each year so that they are spreading their risk over different years.

It takes about two years to see the improvements from trefoil applications so these should be made a year before the existing plants die out. This will continuously maintain a good pasture rather than allowing it to lower its production. Frost seeding is one of the most economical and easy improvements that can be made to a pasture.

Original written by Harry Harricharan and Joan McKinlay.

\*Disclaimer: this article was written in Ontario

Source: http://www.omafra.gov.on.ca/ english/crops/facts/98-071.htm

# Environmental

rachel@foothillsforage.com Farm Plan Workshop

Wheatland County Strathmore, AB October 25, 2016 9:30am



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## Fortify Soil Health Conference Invite



"A look at your livestock below the surface"

When: Wednesday November 30th 2016, 9am to 4pm.

Where: Lethbridge Lodge and Conference Centre

Address: 320 Scenic Dr S, Lethbridge, AB, T1J 4B4

#### **Guest Speakers:**

Yamily Zavala, Ph.D. CARA's Soil Health and Crop Management Specialist

Matthew Slaughter, President and Lab Director of Earthfort
David R. Montgomery, Ph.D. Professor of Earth and Spaces
Edwin Liem, Ph.D. Technical Manager at Canadian Humalite
International Inc

**RSVP:** \$100 per person to be paid when booking. This includes lunch as well as tea, coffee and snacks.

Please RSVP before November 18th 2016 with payment to ensure your space!

\* Spaces are limited\*

Conference will be filmed and DVD's available after.

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# How Hay is Stacked Does Make a Difference

A year's supply of hay has been harvested. Bales are coming into the feed yard for storage. What is the best strategy to stack and store the hay to minimize weather damage, shrink, and nutrient loss? Preventing moisture



Figure 1. The Pyramid Stack



Figure 2. The Mushroom Stack



Figure 3. The Individual

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 (Figure 1) 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 (Figure 2) 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 (Figure 3) 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 melts can run off the bale surface minimizing damage.

Bales that are stacked outdoors and unprotected from the weather lose weight over the storage period. Up to 15% of the bale weight (dry matter) can be lost over the first winter. Reducing moisture migration into the bale reduces weight loss.

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

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.

#### Source:

Barry Yaremcio Beef and Forage Specialist Ag-Info Centre Stettler

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#### Managing Uncertainty in Alberta's Cow Calf Sector

Date	Location	Venue	Time
November 1, 2016	Nanton	Nanton Community Center	9 a.m. registration 9:30 a.m3:30 p.m. session
November 2, 2016	Lethbridge	Country Kitchen Catering (same building as the Keg on Mayor Magrath Drive)	
November 3, 2016	Olds	Student Alumni Centre at Olds College	
November 8, 2016	Vermilion	Vermilion Regional Center	
November 9, 2016	Evansburg	Royal Canadian Legion	

#### The agenda this year will cover:

- Market Outlook and your Marketing Options
- Transition Planning The Human Aspect
- Risk Management Perspectives
- Cost of Production Do you know yours?
- 7 drivers to Financial Success
- What does your Neighbor Think? A Beef producer's perspective.

For more information go to agriculture.alberta.ca/cowcalfenomics

#### **How to Register**

All participants are requested to register prior to Wednesday, October 26, 2016. The registration fee is \$30 (GST included) and includes lunch. Registration for students and young producers (those under 25 years of age) will be sponsored by the Alberta Beef Producers. To register please call the Ag-Info Centre at 1-800-387-6030.



















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