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February 2017

Photo Credit: Lee Gunderson

Director's Note

Don't underestimate the value of stockpiled grass.

I was out checking pastures last week evaluating stockpile inventory to determine when we can stop feeding and start grazing.

I start calving in May and sell calves in August/ September as grassed yearlings. Cow/Calf pairs will follow our grassed yearling rotations in the fall until mid-November. Then I buy backgrounding calves in the fall, followed by our winter feeding program.

Where the yearlings are going to start there is about 8 inches of folded over meadow brome grass and standing regrowth alfalfa leftover from last year's grazing.





These pictures were taken February 1st and there is still green leaves in the thatch and fine leaves of alfalfa. The last couple years we have started our yearlings grazing through our pastures late March.

I will roll out round bales of hay every couple days at

about 7 lbs/day till about mid April depending on how much stockpile is available.

In 2014 we sold yearlings June 12 because of extremely dry spring conditions and very little early grass growth. In this short time the yearlings gained 2.0 lbs/day which exceeded my expectations. In 2015 we did the same thing in the spring and sold the yearlings Sept 12. During this period they gained 2.28 lbs/day.

Our winter ration for backgrounding steers is calculated for 1.25 lbs gain so if we can keep these quality grasses in a stockpile and use them early, this greatly reduces our cost and workload in the spring. The weather is always the wildcard so have plan B, C and D ready if needed.

It's a lot easier to have cattle out grazing than feeding. It saves time and money and is just easier all around. It is easier to work with mother nature than against her.

- Rod Vergouwen

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What is Rotational Grazing?

farmers across the province about grazing management, I have come to realize that rotational grazing means different things to different people.

The dictionary definition of rotation is "to change or alternate in a particular sequence; regular variation". To a crop producer, rotation means a different crop or sequence of crops in a field over a number of years. When we talk about rotation in relation to grazing, the most important factor is the state of the grass growth. The guiding principal of rotational grazing is to give the grass crop every opportunity to grow and produce forage for the livestock. The rotation refers to the movement of the livestock from one paddock to another during the grazing season.

According to the University of Guelph and OMAFRA Beef Cow-Calf Benchmarking Study, the biggest cost component is feed. When asked about feed bunk was only filled every five grazing practices, over half of the participants reported that they were rotational grazing. However, there was a big range in the results that they were achieving.

The concept behind rotational grazing have on pasture, there should be a is to harvest the grass quickly and then give the forage time to recover

What is rotational grazing? As I talk to and re-grow. This is accomplished by giving the livestock enough grass for the prescribed feeding period and then moving them to a new field. The more frequent these moves, the more productive the pastures will be. The maximum length of time in a paddock should be 5 days. Why 5 days? Grass starts to re-grow five days after it is harvested. When does a hay field begin to green-up after being cut? There is usually new growth started in 5-6 days. In a pasture, this new growth is candy to the livestock and they quickly re-graze it. This regrazing depletes the root reserves of the plants, reducing plant vigour and subsequent growth.

> An optimal rotational grazing system has the livestock moving to fresh grass every 1 to 3 days. If the grazing period is longer, there will be reduced performance by both the livestock and the grass. Think of the pasture field as a feed bunk. Would you expect livestock to perform well if the days? Fresh feed encourages consumption and increased consumption means increased performance.

For each group of livestock that you minimum of 10 paddocks to give the grass an opportunity to recover from the grazing. Twenty paddocks will go a long way to encouraging increased animal intake. Thirty paddocks will allow you to realize the full potential of both the pasture and the grazing livestock. This may seem like a lot of paddocks, but with the use of electric fence, including some temporary or portable fence, it does not need to be insurmountable. Cattle trained to electric fence and accustomed to moving every 1-2 days to fresh grass will meet you at the gate for their next move.

Grass growth varies during the season. Rapid growth occurs in May and June. Much slower growth happens during July and August, when temperatures tend to be higher and moisture is less available. Pasture managers who use an effective rotational system find that they have increased grass growth and carrying capacity throughout the season and a dramatically reduced need for feeding hay.

Rotational grazing means fresh grass every 1-3 days and a sufficient rest period for the grass to grow to the optimum grazing height (20-40 cm). Rotational grazing at this level will provide the most high quality forage at the least cost.

Author: Jack Kyle - Grazier Specialist/ OMAFRA/Lindsay

Source: www.omafra.gov.on.ca/

Thank you for your support!





















Annual General Meeting Featuring Farm & Food Care Canada's CEO

Crystal Mackay & Nuffield Scholar Tim Smith



Crystal Mackay was raised on a beef and dairy farm in the Ottawa Valley. Now the **CEO of Farm & Food Care Canada**, Crystal is a dynamic presenter who has delivered **hundreds of presentations** to a broad range of audiences **from farmers to university students to CEOs** across North America and has over 20 years experience in both industry and public relations. Her topics:

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March 20, 2017

Crossfield Hall 9:30am \$30/person \$30 annual membership *Lunch Included

*Register by emailing rachel@foothillsforage.com or calling 403-995-9466

Through his Nuffield project, Tim Smith plans to research the valuation of ecological goods and services provided by cattle ranching.



He believes there is much to be studied in how other cultures recognize and valuate pastoral benefit.

His interest is in the development of national support to encourage and improve sustainable habitats, as well as how that support is transferred to the actual stewards of the land. Tim believes that good stewardship of the land will be increasingly important to the financial health of Canadian cattle country.

Bale Grazing Dos and Don'ts

If you're going to be feeding your livestock this winter, bale grazing could be right for you. It can save you time and money and even improve your pastures. Here are some tips from the Manitoba Grazing Council to help you get started and make it work for you.

How Many Bales Should You Put Out?

This math really isn't any different than what you use when you're figuring how much hay to purchase. The amount of dry matter feed needed will be 2.5 to 3% of each cow's body weight. Don't forget to

factor in waste. In the Manitoba publication they suggest 20% as a good rule of thumb for figuring waste. Others suggest numbers as high as 50%. Check with an expert in your area to give you an idea what to expect. To figure how many additional bales you'll need due to waste, multiply the number of bales times your estimated waste percentage. That will give you the additional bales needed. Here's an example. You have 200 cows. Each weighs 1400 pounds. They need 2.7% pf their body weight in feed and you'll be feeding for 92 days. The bales weigh 1,200

> pounds with 85% dry matter.

—

Where Should You Bale Feed? Seeded perennial fields with at least one "rhizomatous" grass species are best for bale grazing. Rhizomatous grasses (smooth bromegrass, quack grass, Kentucky bluegrass) roots (rhizomes) and are best adapted for growing up through the waste that will be left behind from bale

Bunch grasses have greater difficulty doing this. If your pasture is dominated by species like crested wheatgrass, meadow bromegrass) you might find dead spots and weed growth where the bales were placed. Avoid using native prairie pastures for bale grazing. These species don't respond as well to high nutrient loads associated with bale grazing. You might simply set yourself up for a weed or tame species invasion.

When you're choosing your bale grazing site, think about where water will flow during spring melt. Since bale grazing concentrates manure in the feeding area, water can carry those nutrients to new locations. If you're bale grazing on top of coarse textured soils, water can carry excess nutrients into ground water. Sloping pastures may mean runoff into nearby streams or ponds. In Manitoba, there are laws prohibiting pollution of groundwater and waterways, and there is growing concern about this in many places that could lead to regulations. It pays to consider your down stream neighbors.

How Should You Place Your Bales?

- Place bales with sisal twine on their sides, because it will rot.
- Place bales with plastic twine on their ends, so the twine can be removed in the fall before feeding.
- spread through both seeds and roots Place bales on a grid of 40 ft centers (Leaving 30 to 35 feet (9 to 10 metres) between the bales, to allow uniform manure nutrient coverage).
 - In Canada, the bale grazing area must be 328 feet (100 metres) from a surface watercourse, sinkhole, spring or well. This is to protect waterways from nutrient bearing runoff.

Formula

of cows X cow's weight X dry matter (DM) intake per day % X feeding period (number of days) = feed (dry matter) needed

amount of feed (DM) needed
----- = feed needed (as-fed)
feed dry matter %

feed needed (as-fed)
----- = bales needed
bale weight

Example 1

200 X 1,400 lb (635 kg) X 0.027 per day X 92 days = 695,520 lb (315,488 kg) DM

695,520 lb (315,488 kg) ----- = 818,259 lb (371,162 kg) as fed 0.85 DM

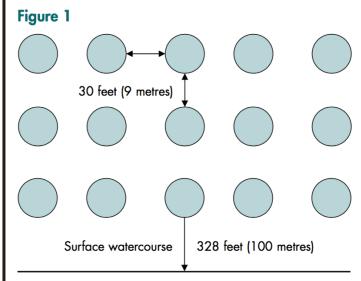
> 818,259 lb (371,162 kg) as fed ----- = 682 bales 1200 lb bale

*Remember to allow for feed waste. See calculation below.

682 bales X 20% = 136 bales in addition to the 682 bales calculated may be needed for feed wastage.

grazing.

Bale Grazing Dos and Don'ts



How to Use Fencing to Feed Bales An electrified wire fence with a very good ground is your best friend when bale grazing. Wire should be placed between the rows to ease the If your bales have varying feed animals' movement for the next feeding. If the ground is too hard to pound in fence posts or fiberglass rods, simply stick them into the bales.

Snow is a good insulator and one

wire won't be effective in keeping animals inside the fence, making a high output energizer and wire combination a better choice than string or tape. In areas with lots of snow an extra lead wire for the fencing wire on top and second wire connected to a good

ground source) are your best bet.

Meet Your Animals' Nutritional Needs

qualities, the Manitoba experts suggest making sure that there are 2 days of good feed followed by 2 days of lower quality feed. This ensures that all stock get enough good food to eat to maintain through the winter.

In colder weather they recommend adjusting the feeding rotation length down a day (e.g. If your rotation is three days, reduce it down to two days) to increase the amount of feed to compensate for colder temperatures.

Good clean water (or good clean snow if you're using that as a watering source) are also important or a double wire (hot to maintaining herd health through the winter.

> Pay attention to animal condition. Skinny cows may need some extra feed to get through the winter. Keeping track of which animals do well and which ones don't will also help you decide which ones need to leave the herd.

By: Kathy Voth

Source: Onpasture.com



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Is it Time to Start Early Evening Feeding?

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It is generally accepted that adequate supervision at calving has a significant impact on reducing calf mortality.

> Adequate supervision has been of increasing the higher price of live calves at sale time. On most ranching operations, supervision of the first calf heifers will be hest daylight hours and the poorest

observation takes place in the middle of the night.

The easiest and most practical method of inhibiting nighttime calving at present is by feeding cows at night; the physiological mechanism is unknown, but some hormonal effect may be involved.

Rumen motility studies indicate the frequency of rumen contractions falls a few hours before parturition. Intraruminal pressure begins to fall importance with in the last 2 weeks of gestation, with a more rapid decline during calving. It has been suggested that night feeding causes intraruminal pressures to rise at night and decline in the daytime.

The concept is called the **Konefal** method. A Canadian rancher, Gus Konefal reported his observations accomplished in in the 1970's In a follow-up Canadian study of 104 Hereford cows, 38.4% of a group fed at 8:00



am and again at 3:00 pm delivered calves during the day, whereas 79.6% of a group fed at 11:00 am and 9:00 pm. In a more convincing study, 1331 cows on 15 farms in Iowa were fed once daily at dusk. 85% of the calves were born between 6:00 am and 6:00 pm.

Kansas State University scientists recorded data on 5 consecutive years in a herd of spring calving crossbred cows at the Kansas State University Agricultural Research Center at Hays, Kansas. They recorded the time of calving (to within the nearest one-half hour).

Births that could not be estimated within an hour of occurrence were excluded. Cows were fed forage sorghum hay daily between 4:00 and 6:00 pm. For statistical purposes, the day was divided into four-hour periods.

Between 6:00 and 10:00 am, 34.23% of the calves were born;

Between 10:00 am and 2:00 pm, 21.23% of the calves were born;

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FFGA MISSION & VISION STATEMENTS

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.





This Publication is made possible by our two major funders - the Agriculture Opportunity Fund and Alberta Agriculture and Forestry.



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Between 2:00 and 6:00 pm 29.83% of the calves were born:

Between 6:00 and 10:00 pm, 8.41% of the calves were born:

Continued to Page 7...

Continued From Page 6... Between 10:00 pm and 2:00 am. 4.4% of the calves were born: and

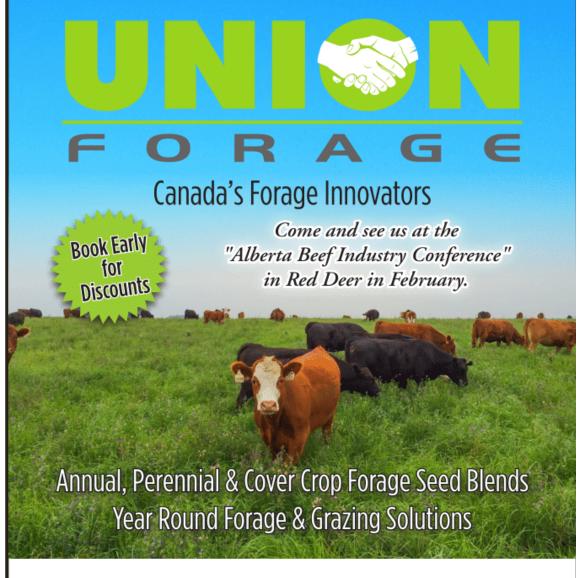
Between 2:00 am and 6 am, 1.91% of the calves were born.

It is interesting to note that 85.28% of the calves were born between 6:00 am. and 6:00 pm. This is very similar to Iowa data when cows were fed at dusk.

These data also revealed that for a majority of animals in the herd, the time of calving was within 3 hours of the average time of day that cow had previously given birth.

Feeding forage in the early evening hours undoubtedly influenced the percentage of cows calving in daylight hours. (Jaeger and coworkers. Abstracts 2002 Western Section of American Society of Animal Science.)

By: Glenn Selk, Oklahoma State University Extension Source: http:// www.cattlenetwork.com/ advice-and-tips/cowcalf/ittime-start-early-eveningfeeding



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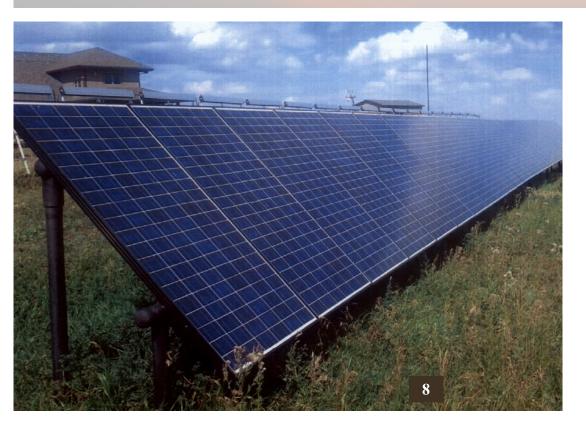
WHERE: Woods Room, Foothills Centennial Centre, Okotoks, AB

WHEN: 9:30am Registration - 3:00pm, March 23, 2017 COST: \$30/members, \$40/non-members, *lunch included

WHO: Anyone can attend. The workshop is geared towards farm and acreage

owners.

HOW: Register online at: https://electricityfromthesun.eventbrite.ca



About the Instructor:

Rob Harlan is the Executive Director of the Solar Energy Society of Alberta. He has taught workshops in solar technologies in both Canada and the U.S. He is highly respected in his field and has over 12 years in designing and installing solar systems.

Questions? Call Foothills Forage at 403-995-9466

