

Over the **Fence**line

Winter 2017

Battle River
Research Group



Merry Christmas



*From the Battle River Research Group Staff and
Board of Directors*

Reminder:

- Renew your Memberships before the end of the year (Call in to check if yours needs to be renewed!)
- We have a forage probe and send away feed samples

IN THIS ISSUE

pg: 2 & 3 Where do the Cattle graze in Alberta

pg: 4 & 5 Effect of Bale Processing on Particle Size and Potential Feeding Losses in Hay or Bale Silage

pg: 5, 6 & 7 Starting the Successio Planning Process

pg: 8 Up Coming Events

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Where Do The Cattle Graze in Alberta?

While the Alberta cow herd has stopped shrinking, it has not yet rebounded back.

"The positive returns for the cow/calf producers over the last few years indicates the Alberta cow herd has finally stopped shrinking," says Herman Simons, farm business management specialist, Alberta Agriculture and Forestry. "In fact, the total beef cow numbers for 2016 show a small increase of about 13,500 head as compared to 2011."

The largest reduction in cows since the 2006 census inventory was in the Edmonton-Calgary corridor in 2011.

"Since then, this region has rebounded somewhat while the North-East and the West have continued to shrink in total head of cows," says Simons. "The southern region (all counties below Calgary) seems to have rebounded the best – however, this region also saw the lowest reduction in numbers. The south had a reduction of 48,000 head in 2011, as compared to 2006, which is 'only' an 11% reduction as compared

to most of the rest of Alberta (Peace, West, North-East and the Edmonton-Calgary corridor) which saw cow herds reduce between 28 and 37% in the same period."

Simons says it is welcome seeing some stability, and even a minimum amount of growth, in a sector that plays such an important role in the Alberta economy. "All regions (other than the West and North-East) have seen an increase of cow numbers since 2011. Most of that occurred in the South (8% increase from 2011) and East (5% increase from 2011)."

At the same time, he says, the number of farms is reducing. "This decline seems to be faster for the beef sector in Alberta as compared to the average of all Canadian farms. There was a reduction of just over 10% of Alberta cow/calf producers in 2016 from 2011, as compared to the Canadian average of about 6% for the same period for all farmers."

This reduction in the number of farms means herds are getting larger. In the last 15 years, the average herd

size has increased by 50% from 63 cows to 95 cows per farm. There is a large difference between the different counties. Larger farms are found in the counties of Ranchland No. 66 (average herd size of 231 cows), Special Areas 2 & 4 (173 & 194 head respectively) and Cardston County (170 head). The counties with on average the smallest herd size are Mackenzie (34 head), Strathcona (40 head), Fairview (52 head), Lamont and Sturgeon Counties (54 head each).

Simons says cows are also moving away from their traditional areas. "For instance, the counties along the Hwy 2 corridor between Edmonton and Calgary have seen a drop of close to 40% in number of cows since 2001, when almost 500,000 head were grazing in this region, to just over 300,000 in 2016. High land value and improved crop revenue are likely to have played major roles in this."

Southern Alberta seems to be one of the exceptions to this as cow numbers have rebounded to pre-BSE (bovine spongiform encephalopathy) levels of about 398,000 head and are almost at 404,000 head in 2016. "The current challenges related to the bovine tuberculosis (TB) issue are not included in these numbers, as TB became an issue after the census data was collected. The counties of Cardston and Cypress are notable as the cow herd increased from 2001 levels by about 12,500 head to just over 107,500 total in 2016. With almost 62,000 beef cows, Cypress County had the highest numbers in Alberta in 2016."

Eastern Alberta has mostly recovered in cow numbers as well. The current numbers are at about 374,000 head in 2001, down to just over 371,000 in 2016. "The only other region, other than Southern Alberta, that has seen an increase in cow numbers is the Peace, likely due to lower land values and the availability of more marginal land. Cows numbers there have increased by about 15% from 2001 to about 123,000."

As always, says Simons, it's clear that profitability is the driving force behind decreases and increases of production. "Having said that, it also seems that other factors are at play that determine the location of the beef herd. Grassland is competing with crop production and it seems that where good productive

dryland is available cows are slowly moving away as that grassland is converted into crop. These animals are instead moved towards areas where there is more low cost, marginal land that is more suitable for grass and forage production than for crop."

Herman Simons
403-742-7571



Don't miss our Up Coming Events!
Page 8!

WATER WELL MANAGEMENT FOR WELL OWNERS

➔ JOIN US AT A WORKING WELL WORKSHOP

HOSTED BY: Battle River Research Group & County of Stettler

DATE: February 20, 2018

LOCATION: Stettler County Office

START TIME: 6:00pm

PLEASE CALL OR EMAIL TO PRE-REGISTER:
780-582-7308 or events@battleriverresearch.com

WORKING WELL
Clean water.
Well protected.

Effect of Bale Processing on Particle Size and Potential Feeding Losses in Hay or Bale Silage

Round bale processors are commonly used for feeding beef cattle over winter. Feeds with a higher proportion of fines after processing may be more susceptible to higher dry matter and nutrient losses due to trampling. This factor raises the question: what is the effect of processing on particle size distribution in the windrow and potential feeding losses?

To answer this question, a study was designed by Alberta Agriculture and Food and Agriculture Technology Center specialists to measure the effect of bale processing on particle size distribution in the windrow. Both dry hay and silage round bales were evaluated, and the findings indicate that bale processing will affect the feed.

Materials and Methods

A bale processor with a large diameter closed drum rotor with flail hammers was used. Two smaller rotors with angled plates assisted bale feeding into the rotor. Material processing rate and cutting length were controlled by an adjustable hoop grate, which varied the flail exposure available to grab the material. A lower flail exposure results in slower processing and shorter material cut length. The unit had deflectors to direct processed material into a windrow.

Half inch and 2 inch flail depth settings were used on each dry hay type to measure the effect of the flail setting on particle size in the windrow. Based on manufacturers' recommendations, only a half inch flail depth setting was used with each silage bale type. Four feed types were selected for the project: alfalfa, alfalfa-grass, grass and cereal greenfeed. Oat greenfeed was utilized in the dry hay project and barley greenfeed for the silage project.

Procedure

Each dry hay and silage feed type was tested for nutrient quality before processing.

Four samples from each feed type and each flail setting were collected in large tubs placed

on the ground. The exterior weathered portion of the bales was excluded from the samples.

Each sample was weighed before sieving. A 3/4 inch screen was used to separate fine and coarse material. The fine and coarse samples were weighed to calculate their percentages of the original sample weight.

Feed analysis samples were collected from the fines and coarse material for each feed type and flail setting.

This process was repeated with three bales of each hay and silage type.

Dry Hay Results

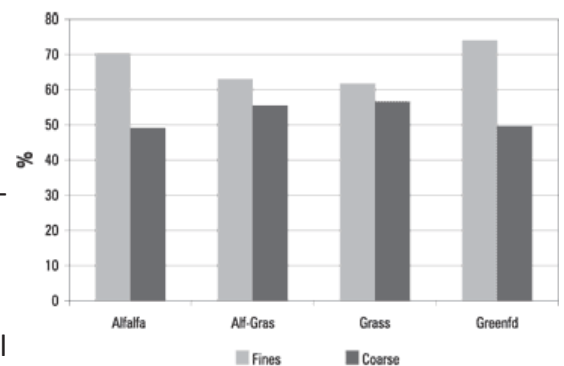
Feed type significantly affected the percentage of fines versus coarse material in the windrow. Flail settings had no effect. As shown in Figure 1, processing had a greater effect on alfalfa hay than on the other three hay types.

Feed analysis reports indicated the fine material had higher concentrations of energy, protein and minerals than the coarse material. The coarse material had higher fiber content, therefore lower total digestible nutrients (TDN), as shown in Figure 2.



Figure 1. Per cent fines versus coarse by feed type – average of 1/2 inch and 2 inch flail settings

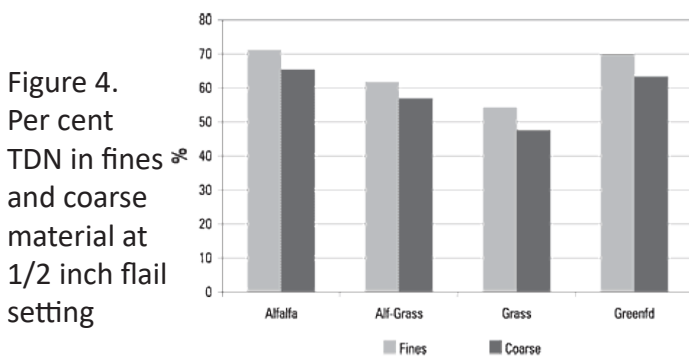
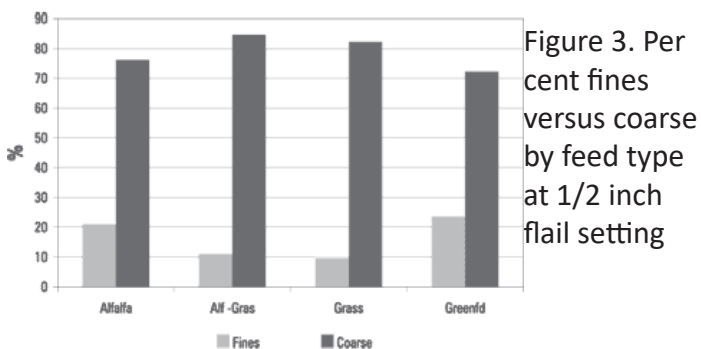
Figure 2. Per cent TDN in fines and coarse material – average of 1/2 inch and 2 inch flail settings



Bale Silage Results

Feed type did affect the percentage of fine versus coarse material in the windrow. As shown in Figure 3, the 1/2 inch flail setting had a greater effect on both the alfalfa and greenfeed bale silage than on the other two feed types.

Feed analysis reports indicated the fine material had higher concentrations of energy, protein and minerals than the coarse material. The coarse material had higher fiber content, therefore lower total digestible nutrients (TDN), as shown in Figure 4.



Conclusion

The results from this project did demonstrate that both hay and silage bales can be affected by bale processing. Feed types did influence the percentage of fines versus coarse material in the windrow.

Processing had the greatest effect on alfalfa or greenfeed in terms of the percentage of fines. Greenfeeds harvested beyond the mid-dough stage may have more grain shelling, leading to higher grain content in the fines. Legume-based hays with high

leaf content will also generate more nutrient-dense fines. Feed analysis results reflected this shift with generally a higher level of crude protein, energy and minerals in the fines versus the coarse material.

Field observations indicated that the fines accumulated in the bottom of the row when processing dry hay. With bale silage, fewer fines were produced with less accumulation in the bottom of the row. Feeds with a higher level of fines after processing may be more susceptible to losses when feeding on the ground or on snow. The loss of fines during feeding may result in livestock not meeting their nutrient requirements for protein, energy or minerals even though initial feed tests showed adequate nutrient levels.

Summary

Livestock producers should be aware of the effect that bale processors may have on different feed types. Steps may be required to manage the feeding program to help minimize potential feeding losses. Feeding systems such as bunks, tubs or fence line feeders should be considered to help reduce both feed quantity and quality losses, especially when feeding cereal greenfeed or legume hay feed types.

Don't miss our Winter Stockmans Clinic!

Winter Stockmans' Clinic

February 8, 2018

9:00am - 3:00pm

Stettler Agriculture Society Pavilion
4516 52 St, Stettler, AB

Join the County of Stettler and the Battle River Research Group for an informative day on: Year-round Watering, Winter Feeding Systems & Costs, Producer Perspective on Winter Feeding Systems, Ducks Unlimited Programs and Riparian Health. Plus an update on Antimicrobial Regulation changes! It will be a day you won't want to miss!



Barry Yaremko - Nutrition, Winter Feeding and Costs Associated
Jason Wright - Cap Solar - Year-Round Watering Systems
Elgar Grinde - Producer Experience with Winter Feeding/Watering
Bob Thomson - Ducks Unlimited - Programs & Riparian Health
Ben Schultz - Maverick Large Animal - Update on Antimicrobial Regulation Changes

Cost: \$20 (includes lunch)

To Register:

www.battleriverresearch.com/coming-events

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Battle River Research Group



Starting the Succession Planning Process

"It is the best of times, it is the worst of times," was a quote on families working together from the Last Alaskan Frontier tv program. If you have seen this show you will be aware of the trials and tribulations experienced by these families as they homestead in the far north. Most of us who are trying to work together won't be quite as extreme as the Kilcher families, however there are likely similarities.

In the next ten years much of the farmland in North America is going to change hands. In 2014 the average age of the Canadian farm operator was 54. Many operations are going to go through some type of transition, be it good or bad. But there are some steps we can take to ensure the process falls more towards the "good" side of things.

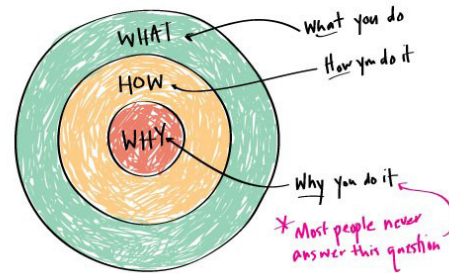
The most important and perhaps difficult is actually beginning the conversation. This has to happen before we involve accountants, lawyers and financial planners. Having a neutral third party to facilitate and lead the discussion can be extremely helpful. This type of conversation is not something those of us in agriculture are used to having. It takes practice and guidance.

The process we go through in Holistic Management of setting a shared values based three part goal that includes quality of life, production and long range vision has proved to be an extremely helpful part of the process.

Stephen Covey in 7 Habits of Highly Effective Families says, "Good families, even great families are off track 90% of the time. The key is they have a sense of destination."

Dr. John Fast, author of the Family Business Doctor, says the common vision helps unite the family around a goal that is larger than the family; functions to inspire the family during difficult times and motivates family members; provides the family with a set of core principles and guidelines to follow; informs the individual growth and development of the next generation and provides a change model for

both individual growth and business development. Simon Sinek, author of Start With Why, believes that all excellent leaders and organizations begin with "Why you do what you do." He explains that we must go deeper than the outer circles of how and what we do. This idea adds great depth to the succession planning piece by digging into the why and sharing it with each other.



The Golden Circle, Simon Sinek
Illustration by Alice Ratterree

There are amazing opportunities and benefits that come with working in a family business but there can also be immense difficulties and challenges.

"Just because we are related and love each other, does not mean we have to work together." So let that notion go.

A vital link of developing the common vision is communicating it effectively. Jamyang Khventse recently wrote, "We think we have successful communication with others. In fact, we only have successful miscommunication without being aware of it."

Effective communication is made up of many things:

1. Listen – to mindfully listen means to wait patiently for the other person to finish before we speak and keeping our mind focussed on the speaker
2. Practise non-judgement – there are always two sides to the story and neither one of them is necessarily right or wrong, only different perceptions.
3. Show understanding – responding with "I understand or I see what you mean." At the end of the day we all want to be understood. You can demonstrate you understand someone by relaying their feelings to them in your own words.
4. Put yourself in their shoes – try to imagine yourself in the experience of the other person.
5. Be totally there – you all know what this

means in the age of tech and business.
 6. The first response should not be personal – it needs to relate to the speaker.
 7. Let go of the results –not a competition
 8. Don't harm – trying to remain kind and compassionate.

Another important component for those families that are going to continue to work together as part of the transition is asking what the roles and responsibilities are going to be?

How are we going to make decisions? How are we going to monitor how we are doing? What is the level of independence and interdependence that is needed? It is important for the younger generation to have achieved a degree of independence before members can all come together in an interdependent way. But each family will be unique in how they define and answer these questions

In one family the question was – would you like a percentage of the herd or do you want to own your own animals? The answer was that there needed to be at least some independent ownership. Of course a level of complexity to keep track is added but that was the consensus of the group.

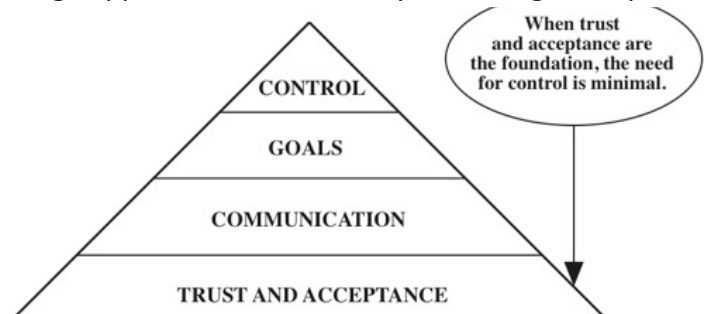
Another family decided on a percentage of the whole operation. Another strategy was to leave the transition/estate plan up to the kids. They brought it back once to the parents and were sent back for further revisions until the final draft was accepted.

One elderly farmer was actually feeling like he had failed as his desire had been to leave one quarter to each kid and he did not quite reach that.

For another family their first objective was to provide each kid with a separate acreage on which to build a house. Once that was achieved and vocalized the balance of allocation was easier as all the kids felt they had been treated “fairly” at the outset.

The communication piece is a critical component to how well a family can navigate through the process. A strong foundation of trust and acceptance is needed to provide the base from which to work.

Effective communication follows, production towards a common goal and then a small amount of control. Many families and organizations are actually upside down with little trust and acceptance thus the need for major control. Plus if there is any type of disruption further up the triangle the whole thing topples over as it is only balancing on a point.



David Irvine, the leadership navigator, has worked with many families and organizations. He stresses the importance of assessing the family vision

- Do we spend time together as a family?
- Do we talk and listen to each other frequently?
- Do we respect differences and encourage interests outside the family?
- Do we communicate directly and honestly and avoid gossip?
- Can we handle conflict in direct, non-hurtful ways?
- How frequently do we express appreciation for each other and demonstrate that we care?
- Can we have fun together as a family?
- Even when we disagree, is there respect and good will among family members?
- Is the loyalty between next generation couples as strong or stronger than that between parents and children?
- Do we share a common vision?

These questions can be of great help as the first pieces of the puzzle are put together. It is so important to remember development of the transition plan is a process. It will take time, money and a commitment by the family members to navigate through all the steps and mis-steps. And it will evolve as the circumstances change. But the rewards will far outweigh the challenges.

-Kelly Sidoryk

Look on page 8 for information on Kelly Sidoryk's Farm Succession Workshop Coming up on January 10!

Up Coming Events

Farm Succession Planning Workshop

Featuring: **KELLY SIDORYK**

January 10, 2018

Holden Community Hall

9:00am-3:30pm

Cost: \$30/person or \$50/Farm Unit (2 ppl)

Join us for a day-long workshop exploring the succession journey for farming families. Facilitated by Kelly Sidoryk, we will examine:

- the steps of the succession planning process
- creating a shared vision
- communication and decision making
- roles and responsibilities
- important members of the succession planning team
- contingency plans
- intergenerational dialogs



Battle River Research Group



To Register:

www.battliverresearch.com/upcomingevents

events@battliverresearch.com

780-582-7308

Winter Stockmans' Clinic

February 8, 2018

9:00am - 3:00pm

Stettler Agriculture Society Pavilion
4516 52 St, Stettler, AB

Join the County of Stettler and the Battle River Research Group for an informative day on: Year-round Watering, Winter Feeding Systems & Costs, Producer Perspective on Winter Feeding Systems, Ducks Unlimited Programs and Riparian Health.

Plus an update on Antimicrobial Regulation changes!

It will be a day you won't want to miss!



Doug Wray - Producer Experience with Year-Round Pasture & Forage Grazing

Jason Wright - Cap Solar - Year-Round Watering Systems

Elgar Grinde - Producer Experience with Winter Feeding/Watering

Bob Thomson - Ducks Unlimited - Programs & Riparian Health

Ben Schultz - Maverick Large Animal - Update on Antimicrobial Regulation Changes

Cost: \$20 (Includes Lunch)

To Register:

www.battliverresearch.com/coming-events

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Battle River Research Group

Alberta
Government

WATER WELL MANAGEMENT FOR WELL OWNERS



JOIN US AT A WORKING WELL WORKSHOP

HOSTED BY: Battle River Research Group & County of Stettler

DATE: February 20, 2018

LOCATION: Stettler County Office

START TIME: 6:00pm

PLEASE CALL OR EMAIL TO PRE-REGISTER:

780-582-7308 or events@battliverresearch.com

WORKING WELL
Clean water.
Well protected.

Farm Succession Planning Workshop

January 29, 2018

Brownfield Public Library

(Located in the Brownfield School)

5:00pm - 9:30pm

Cost: \$30/person or \$50/Farm Unit (2 ppl)

Supper Included

"Succession planning is not estate planning. Succession is the transfer of the farm business not just the assets.

Remember a business requires clarity to successfully succeed and you owe it to your family to provide this.

What does that mean? Come out to the Brownfield seminar and find out" - Merle Good

Brownfield Public Library



Battle River Research Group



To Register:

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780-582-7308