Photo Credit: Lee Gunderson

FOOTHILLS FORAGE AND GRAZING ASSOCIATION

PO Box 458 Okotoks, AB T1S 1A7
Phone: (403) 995-9466
www.foothillsforage.com

January 2017

Director's Note

Happy New Year to all FFGA members and producers! 2017 starts off with fairly strong cattle prices, and for the first time in a long time, all 3 components of the beef industry are actually making a little money. We all know that this rarely occurs, but it is quite necessary to rebalance the scales in the industry.

However, if any portion of the industry loses money for any length in time, the net result is further consolidation. We've seen this recently with the shutting down and sale of several feedlots and a further erosion of several thousand cattle producers across the country in recent years. As a wise man once told me, there's always money somewhere in the industry.... the trick is finding it!! Oh well, that's why producers that are still in the cattle business, have done a pretty good job of getting their 'piece of the pie'.

The weather is always a topic of discussion in the ranching industry, and this winter has been no exception. November (which can be all-winter, in these parts), was so mild, that the harvest went full-steam ahead. December, however, was like Mother Nature flicked the switch and winter came in with a vengeance. Luckily, the last couple of weeks have been more seasonal, with a nice covering of snow...

Regardless, most folks look forward to winter's end and the first signs of spring, which leads me to my little ditty on that very topic.

Winter's Done

I know when winter's done for good
And spring has come to sprung
When winter's grip,
Has eased a bit
And the awakening has begun
But it's not when the ice in the water trough
Don't require a daily choppin'
Nor when that warm south wind,
Blows steadily in
Then the barometer starts a-droppin'
It's not when the bulls start sheddin' hair
And rub on any posts
Nor when those calves
Are running mad
Though it's a sight I love the most
And it's not when crocuses start to bloom
Nor when the willer starts to bud
And it's no surprise
When the creeks all rise
And begin their yearly flood
Yes these are signs that winter's done
And spring has turned the clock
But I know winter's cold
Has lost its hold
When we burn our chopping block!

- Morrie Goetjen

IN THIS ISSUE

Mark Your Calendars!

Event	Date	Location	Information
Farmer's First Aid	January 16 & 17	Airdrie	Learn the skills that will give you compliance with Bill 6 and help you to protect yourself, your employees, family, and community. The 2 day course is a fully certified CPR/AED First Aid Course.
Calving Clinic ft. Jim Bauer	January 19	Pincher Creek	Join Jim Bauer as he speaks to the pros and cons of calving at different times of the year (nutrition and energy requirements, healthy environments for calving, calving on grass versus a corral system). The day will also feature Country Vets Ltd. on common calving problems.
Ladies Livestock Lessons	January 28	Balzac	The annual hit event is back! The day will feature social media sensation Cody Creelman: Cow Vet on pathology for producers, antibiotic resistance, and social license. Ladies will also enjoy Kristin Cumming on Generations and Impacts in Agriculture and many more!
Ranching Opportunities	February 9	Olds	Ranching Opportunities is back! This year's theme is "Smart Strategies for Your Ranching Business". Featuring Andrew Campbell of #farm365, Cattleland Feedyards on Conventional vs. Natural Beef Finishing, a cover crop 'Producer Panel', VSB update, soil health with Dr. Yamily and more!
Solar Workshop	March 23	Okotoks	It is becoming increasingly profitable for Alberta farmers to generate their own electricity and sell it to the grid. This is a one day workshop on grid tie solar options for Alberta farmers and acreage owners.

Visit "Events" on www.foothillsforage.com or call 403-995-9466 for more information

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.

Thank you for your support!

M.D. of PINCHER CREEK 9 · MUNICIPAL DISTRICT of BIGHORN · Mountain View COUNTY · M.D. of FOOTHILLS No. 31 · MD of RANCHLAND NO. 66 · WHEATLAND COUNTY · Vulcan COUNTY · Kneehill County · ROCKY VIEW COUNTY Cultivating Communities

Tighty Whities Can Tell You About Your Soil Health

This is a fun experiment you can try with your own pastures and fields. It comes to us from Anthony Bly and Sara Berg of South Dakota State University Extension. Just remember that different areas will have different kinds of soils and you may get different results.

Soil microorganisms require carbon to survive. Men's cotton underwear briefs contain high amounts of carbon. Therefore, briefs can be buried in the soil and retrieved later to see and evaluate soil microbiological activity and ultimately, soil health status. During the South Dakota Soil Health Coalition's first Soil Health School in the Aberdeen and Ipswich areas, a "Tighty Whities" demonstration was conducted.

The briefs were buried to about the waistline in the soil five weeks ahead of the school at 3 sites that included: corn with conventional tillage, soybeans under mulch tillage, and no-till soil with cover crops. Soil health school participants had the opportunity to extract the briefs and view the results of five replicates in each field. Results were revealing…to say the least.

The first soiled brief in the picture above (second from the left) was from the no-till field with cover crops. Hardly anything remained of the brief, indicating extensive soil microbiological activity. The brief from the mulch (reduced) tillage soybean field (third from the left) had more material remaining when compared with the no-till/cover cropped soil, and the conventional tilled corn (for right) had the most material which indicated the least soil microbial activity. All 5 briefs buried at each site were weighed, with the results matching the degradation observed in the photo.

A new brief was compared to one brief from each field.
"Tighty Whitie" demonstration, 2016 Soil Health School, Aberdeen, SD (SDSU Extension)

Brief Condition (Figure 1. order left to right)	Average Brief Weight (grams/ brief)
Control– non-buried	58.5
No-till soil with cover crops	28.4
Mulch (reduced) till soybeans	48.3
Conventional tilled corn	50.8

The "Bottom" Line

Soil microbial activity is a key soil health indicator. Most seasoned soil health producers recognize the value of the soil microbial kingdom and often refer to it as "the herd."

If you're a crop producer considering no-till and are concerned about too much residue consider using another herd to help your soil microbial herd. Integrating cover crops and livestock in a no-till system can profitably utilize and manage plant residue levels.

By: Kathy Voth

Source: www.onpasture.com

Thank You to Our Corporate Sponsors

The Economics of Swath Grazing


Photo Credit: T. Gompert, SD

Feed costs are the largest and most manageable expense for cattle operations. Decreasing the feed cost per unit of production ($/lb weaned) will directly improve the overall profitability of a cow-calf operation.

Feed costs can be lowered with grazing because this method tends to be a cheaper way of maintaining cattle when compared to drylot feeding. In essence, swath grazing "buys" grazing days or extends the grazing season and provides the opportunity to lower winter feeding costs by reducing the number of drylot feeding days required.

How to assess swath grazing

To assess swath grazing, producers need to evaluate both the drylot and grazing operations. Drylot feeding costs can be grouped into two categories:
1.) Feed and bedding cost
2.) Yardage cost

The feed and bedding cost element is calculated as the market value of feed and bedding delivered to the cattle. Yardage relates to the operational and "business structure" costs of feeding and maintaining cattle in a drylot. These costs include overhead, or fixed costs (depreciation on sheds, corrals, water systems, machinery used, etc.), as well as the variable costs of delivering the feed (fuel, repairs and maintenance, labour, corral cleaning, etc.).

With swath grazing, many of these costs can be reduced or eliminated as they are replaced by the cost of the swaths plus the cost of managing the cattle in the field.

As part of the swath grazing research program at Lacombe, an in -depth survey was conducted to assess the costs associated with feeding stored feed versus swath grazing on Alberta farms. Results from this survey show that the **costs of swath grazing were approximately 50 per cent less** than the on-farm costs for feeding stored feed.

Since swath grazing will occupy a site that had previously grown a crop, it is important to consider the value of the forgone cereal or forage crop when determining the economic value of a swath grazing program.

Using a partial budget

A partial budget is a simple tool that can be used to compare the economics of swath grazing versus feeding baled greenfeed. The objective in the partial budgeting process is to isolate only those elements that change as the result of the adoption of a new management practise. In this example, we want to compare the costs of using a field for swath grazing with the costs associated in using the same field to produce green feed for use in a feed yard. If the partial budgeting process indicates a Net Advantage, then swath grazing could offer a viable winter feeding strategy. Table 2 provides a example of a partial budget comparison of swath grazing with feeding baled green feed.

The following outline summarizes the key revenue and cost elements needed to analyze the swath grazing decision. There are three main budget areas to consider:

1.) Greenfeed crop - crop production costs, baling, winter feed handling costs

2.) Swath grazing crop - crop production costs

3.) Cattle feeding costs - yardage costs, grazing costs

Partial budget assumptions for Table 2

Swath grazing/greenfeed crop

Production cost: Crop production costs for swath grazing or greenfeed production are assumed to be equal from seeding to swathing.

Forage production: Based on barley swath grazing trials in Lacombe (Table 1), forage yields are assumed to be 7,300 lbs/acre (dry matter) for both swath grazing and green feed.

Feeding losses: A feeding loss of 20 per cent has been assumed for feeding both baled greenfeed and for swath grazing.

Baling and picking costs: Assumed 5.84 bales/acre at $10/bale = 5.84 * $10/bale = $58.40/acre.

Feeding days per acre: Daily feed intake is assumed to be 27 lbs of dry matter per day for both feeding systems. Based on this level of feed intake, the number of feeding days available would equal 216 days/ acre for either feeding system (7,300 lbs D.M. *.80)/27.

The Economics of Swath Grazing

Table 2. Partial budget form

What is to be done? Clearly define the decision: Swath grazing barley instead of making greenfeed bales and feeding them to cows.	
Swath grazing costs	**Feed yard costs**
Grazing costs: $32.40/acre	Drylot yardage cost: $108/acre
($0.15/AUD* 216 AUD/acre)	($0.50/AUD* 216 AUD/acre)
	Baling and picking: 58.40/acre
Total costs for grazing swaths: $32.40/acre	Total costs for feed yard: $108 + 58.40 = $166.40/acre
Net advantage or disadvantage for swath grazing Swath grazing advantage $134.00/acre ($166.40 - 32.40 = $134/acre)	

* It is very important that all the units are on the same basis (i.e. $/acre or $/AUD)

Grazing costs: Grazing costs for swath grazing are assumed to be $0.15 per AUD or $32.40/acre (.15 *216 feeding days/acre). Grazing cost based on field research by the Economics Unit of Alberta Agriculture, Food and Rural Development.

Yardage cost: For the bale feeding system, yardage costs are assumed to be $0.50 per AUD or $108 per acre ($0.50*216 feeding days/acre). Yardage cost based on field research by the Economics Unit of Alberta Agriculture, Food and Rural Development.

These budget assumptions are now used in the partial budget format (Table 2). It is important that all costs and revenues are calculated with a common unit such as $ per acre. In this specific example, the partial budget process indicates that swath grazing provides a positive return of $134 per acre, which would suggest there are some advantages to using swath grazing. It is important to remember that partial budgets only deal with immediate changes in revenues and costs and are targeted more towards short-term decisions.

** AUD refers to an "animal unit day," which is a standard measure for a 1,000 lb cow for a day. For example, if the yardage cost for AUD is $0.50 then the cost for 1,350 lb cow would be $0.50 *1.35 or $0.67per day.

If swath grazing is to become a longer term feature of the farm business, replacing crop and/or forage production, a more complete analysis that factors in the relationship with other farm business enterprises is advised. Some considerations to be included in this analysis:

- Will swath grazing fit in with longer term cropping plans and rotations?
- Will it provide a comparable return on the land asset, considering the range of crops that can be grown on the land?
- How will swath grazing fit in with the existing perennial forage grazing system?
- Can feeding facilities/equipment be adjusted (e.g. via downsizing equipment or expanding numbers fed)?
- What are the risks associated with swath grazing as opposed to feeding in drylot?

Swath grazing is a viable option for many livestock producers. The practice offers the potential to reduce feed costs, labor costs and manure handling. As with any new management practice, creating a successful swath grazing program requires planning.

Producers need to carefully assess field characteristics, animal condition and options for crops, water sources, shelter, fencing, residue management and manure management. The viability of swath grazing depends largely on local conditions, snow depth and wildlife problems, and producers need to assess the economic feasibility for your own situation. Diligent livestock management principles need to be applied to keep the animals healthy. Supplemental feed may be necessary during periods of cold temperatures and heavy snowfalls. Maintaing body condition score is critical for success.

For a Swath Grazing Calculator—Click Here (www.agric.gov.ab.ca)

Full Article Source: http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex9239

Ranching Opportunities 2017 Conference

... SMART STRATEGIES FOR YOUR RANCHING BUSINESS ...

OLDS COLLEGE
February 9th, 2017

REGISTER AT

https://2017ranchingopportunities.eventbrite.ca

Registration closes February 2nd

$45 registration fee includes lunch, coffee, snacks, and tradeshow

TRADESHOW

The Ranching Opportunities Tradeshow is an opportunity for producers to meet local organizations, businesses, industry groups and other key contacts.

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LONE STAR RANCH & SALES

HOSTING PARTNERS

Olds College, M.D. of Bighorn, Red Deer County, Kneehill County, Rocky View County, Wheatland County, Mountain View County, Alberta Agriculture and Forestry, Foothills Forage and Grazing Association

Conference Agenda

Olds College Alumni Centre, Thursday February 9th
8:30 AM to 4:30 PM * Free Parking

#RanchingOpportunities

Young & Farming: bridging the gap
Andrew Campbell, #farm365

Breakout Sessions:
Transportation will be available for those who need it, otherwise dress for all weather walking!

"On the Fence" Demonstration
Electric Fencing - Jim Bauer, Anchor JB Ranch
3D Fencing - Grey Wooded Forage Association
Gallagher Canada Power Fence - Garth Hein, Lone Star
Precision Fencing - Lloyd Quantz, Greenedge Precision Fencing
Wildlife Friendly Fencing - Alberta Conservation Association & MULTISAR

Get Prepared for a Livestock Emergency
Nora Abercrombie, Biosecurity Programs at Government of Alberta
What do you do with your cattle in the event of an emergency? Join Noreen Abercrombie to learn how to make a plan, and tour the Red Deer Livestock Response Trailer!

The Dirt on Soil Health
Dr. Yamily Zavala, Chinook Applied Research Association
Get your hands dirty with Dr. Zavala while learning how to measure the health of your soils!

Conventional vs. Natural Beef Finishing
William Torres, Cattleland Feedyards

Verified Sustainable Beef Project Update
Fawn Jackson, Canadian Roundtable for Sustainable Beef

Producer Panel: The 5 W's of Cover Crops
Producers: **Morrie Goetjen, Rod Vergouwen, Graeme Finn**
Moderator: **Laura Gibney**

Find Ranching Opportunities online
http://nfrenc4.wix.com/ranchingopportunity

Contact Daniela at Mountain View County for more information: 403-335-3311 Ext. 204 or dlemus@mvcounty.com

Range Management: Then and Now

Rangeland ecosystems have evolved over thousands of years, adapting to the soils, climate and natural disturbance factors of the Northern Great Plains, especially the influence of wild grazers like bison.

What is Rangeland?

Rangeland, or range, is land supporting indigenous or introduced vegetation **that is either grazed or has the potential to be grazed** and is managed as a natural ecosystem.

Rangeland includes:

- Grassland
- Native Pasture
- Grazeable forestland
- Shrubland
- Pastureland
- Riparian areas
- Shrubland

Rangelands are an important agricultural resource for livestock grazing. In Alberta, it is estimated that rangelands provide forage to about 14 per cent of the Alberta beef cattle herd.

Rangeland Management: Then and Now

Simply stated, range management is about balancing human needs and demands from rangelands with the needs of the range resource; i.e. to protect soil, vegetation and water.

The first domestic livestock arrived in Alberta with the fur trade and eventually ranching became established by the 1870's.

Traditionally, range management has dealt with manipulating grazing so that both plant and animal production are maintained or improved.

Today, range management also includes a broader perspective of grazing. It is viewed as a natural process and tool for perpetuating rangeland ecosystems to be managed along with other factors like fire, disturbance, and human activity.

Ranching and range science have served to protect much of the remaining native range, a home to a vast array of flora and fauna (fish and wildlife), ecological goods and services, and vital to the livestock industry and future needs and appreciation of Albertans.

For more information about the history of Rangeland Management in Alberta, you can review a copy of the Grazing Lease Stewardship Code of Practice.

Goals

Key goals of range management are to maintain:

- A diversity of native plant species, especially deep-rooted and productive forms
- Vigorous healthy plants with well developed root systems
- Adequate vegetative cover to protect soils from erosion and to conserve scarce moisture
- Rangeland management principles

Principles

Range management principles are applied to maintain or foster healthy productive rangeland. These include:

- Balancing livestock demands with the available forage supply; the rancher harvests forage to produce red meat but leaves adequate ungrazed residue to protect plants and soil
- Promoting even livestock distribution by using tools like fencing, salt placement and water development to spread the grazing over the landscape
- Avoiding grazing rangeland during vulnerable periods; early spring grazing can stress range plants when energy reserves are depleted as new growth is initiated
- Providing effective rest periods after grazing to allow range plants to recover from the stresses of grazing
- On Alberta rangelands, a planned and balanced cycle of forage harvest and renewal is required to protect the range resource and sustain the many benefits that rangelands provide.

By: Alberta Environment & Parks
Source: http://aep.alberta.ca/lands-forests/grazing-range-management/

Alberta Government
Agriculture Opportunity Fund

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FFGA is a proud member of ARECA

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Canada Thistle Mining Weevils: A Hopeful Biocontrol?

Photo Credit: Integrated Weed Control

What if we could control Canada thistle without the use of herbicides that destroy our mixed legume and alfalfa stands?

And more importantly, save money in the long run without the expensive costs of annual herbicide application? That is where the Canada Thistle Mining Weevil comes into play or *Hadroplontus litura.*

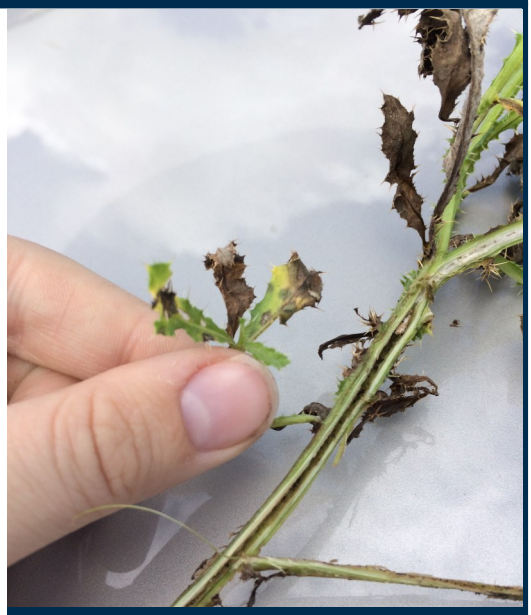
This weevil was first introduced to Canada from Europe in 1965 and feeds solely on Canada Thistle and a few close relatives. It attacks the rosettes of Canada Thistle in early spring before the thistle bolts. The adult weevils attack the foliage of the thistle plants and the larvae mine the inside of the stem.

In early summer when the larvae have fully fed, they emerge from the thistle through small exit holes that they chew near or just below ground level. They work their way into the soil, and enter the pupal stage in which they transform into adults. After two to three weeks, adults emerge from the soil in late June and July and feed on the thistle foliage until heavy frost occurs in the fall. Although foliage feeding seems to slow growth in the thistle, the larvae seem to have the biggest impact on thistle health.

FFGA is currently participating in a regional weevil trial. In 2012, 58 dishes (each containing up to 105 weevil individuals) were released into controlled sites across Alberta. The objectives of the project were to determine if the weevils would work, if a native population could be established in Alberta, if they are a cost effective control, and if additional weevils need to be added in consecutive years to follow.

Foothills set up two trial sites, one with Rod & Beth Vergouwen near Strathmore and the other with Phil & Pam Rowland near High River. The weevils have not been detected on the High River site since their fall 2012 release, leading us to believe they did not survive the winter. However, Foothills is keeping track of the progress near Strathmore as weevils and larvae have been found each year since.

In year 4 of the plot at Strathmore we are starting to see a reduction in thistle populations. Adult weevils were noted present and damaged and dead thistle were visible. In comparison to the control, the weevil plot noted a 100 plant decrease in the 25m^2 plot.



Mined thistle stem and the effects on the plant as a whole.

This leads us to believe that the weevils are successful based on a long-term strategy and favorable temperature conditions upon release. The benefit of these creatures is their ability to be placed in sensitive areas such as riparian areas, native pastures, or organic pasture.

Foothills Forage is placing an order with the West Central Forage Association for weevils for August/ September 2017. If you are interested in ordering weevils, please contact the WCFA office at (780) 727-4447.

Price TBA based on USA exchange rate

Article and Photos By: Rachel McLean

Manager:
Laura Gibney
laura@foothillsforage.com
Cell: (403) 998-4687

Environmental Coordinator:
Rachel McLean
rachel@foothillsforage.com
Cell: (403) 700-7406

PO Box 458
Okotoks, AB
T1S 1A7
Phone: (403) 995-9466
www.foothillsforage.com