



# The Blade

Monthly Newsletter of the  
*Grey Wooded Forage Association*

February, 2019





# COMING UP

March 12	Grazing Through Adverse Conditions	Winfield, hosted by GWFA, Leduc County and Wetaskiwin County. Register by March 8 with Kim Barkwell at Leduc County, <a href="mailto:kimb@leduc-county.com">kimb@leduc-county.com</a>
March 20-21	Alberta Farm Animal Care Annual Conference	Pomeroy Inn, Olds Collage. Visit <a href="http://www.afac.ab.ca">www.afac.ab.ca</a> for details
April 18	Lacombe County EFP workshop	Lacombe County Building Contact Brenda or Greg at Grey Wooded Forage Association for more information

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Contact our office to be added to our digital mailing list

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The Grey Wooded Forage Association is a member of the Agricultural Research and Extension Council of Alberta

## Office Report

By Brenda Kossowan

I keep telling myself that nights of -30C and colder are over for this year. My thermometer, water and sewer lines keep telling a different story.

Livestock producers throughout a region touted as being colder than Siberia in recent weeks are therefore offered some advice on what they need to do for their critters in the aftermath. We have reprinted an article by Barry Yaremicio, a regular contributor to *The Blade*, on Page 4 of this edition. You can find more of Barry's advice in past editions of *The Blade*, available online in the resources section of our website. Some of his articles, as well as those by other specialists, are also available in the archives of *Agri-News*, an online update published every Monday by Alberta Agriculture and Forestry.

*Agri-News* contains a wealth of good information for producers of all stripes, from feature stories to a detailed list of coming events. Vist Agri-News online at [alberta.ca](http://alberta.ca) or email [agrinews@gov.ab.ca](mailto:agrinews@gov.ab.ca) for a free subscription.

Readers will see from Greg Paranich's article on Page 5 that the intrepid staff and volunteers from Grey Wooded Forage Association are forging ahead with plans for applied research that matters not just on the ground, but within the soil itself.

In recent years, GWFA and its partners have been involved in a variety of investigations, including testing the value of 3D fencing for keeping elk out of stored hay, evaluating the longevity of hardy alfalfa varieties, helping producers attract pollinators to their fields and test-driving the value of stem-mining weevils as a non-chemical means of controlling Canada Thistle.

While the others are still in progress, 3D fencing has been laid to rest with the conclusion that the methods used are not effective against hungry ungulates during a harsh winter.

We have also committed to a soil carbon benchmarking project, led by the Chinook Agricultural Research Association and in partnership with a variety of other similar groups throughout the province. Grey Wooded Forage Association made a significant cash contribution to the project in the spring of 2018 and will follow up with samples take from a variety of test sites throughout the six counties we serve, starting in spring.

Also this year, we are widening our scope to include at least three new projects, funded to a large extent by a new agreement with Alberta Agriculture and Forestry through the Canadian Agricultural Partnership.

We have laid the ground work for three innovative projects that will investigate, in no particular order, intercropping with annuals for improved forage performance; applications and potential of activated charcoal as a soil amendment, and a pasture regeneration project in the foothills area, along the banks of the Red Deer River.



Each of these projects has a variety of partners who will provide valuable expertise and other resources to help us help you improve production in ways that provide longterm sustainability for the environment as well as your bank account.

In keeping with all of those projects, we will host a variety of workshops and seminars to update producers and industry on the progress of our efforts and to generate discussion that may lead us down new paths toward fulfilling our mission of promoting environmentally and economically sustainable forage and agricultural practices. We will have everything laid out on the table for all to see during our 2019 Annual General Meeting, which is now under development.

Planning has started now for an early-summer AGM and fundraiser, which will include an afternoon of mini-workshops, an awesome dinner and a rousing keynote speech from someone—as yet unnamed—who shares our passion.

Please let Greg or me know if you have any suggestions for workshop modules that might be of interest to you. We are considering a few ideas at this point, such as an introduction to using drones, a soil science demonstration and a short-course on bovine genetics.

Details will be released in April, once we have determined the date and location for the AGM.

In closing, I would like to welcome Caroline-area producer Alex Neal to the GWFA Board of Directors. Alex stepped forward a few weeks ago, when we were advertising for new people to join the board. He was installed last week as an *ex-officio* director and plans to run for election during the AGM.

We will have four vacancies to fill, so I encourage anyone who would like to know more about what GWFA is about to give us a call or drop into the office for a chinwag. Members are also welcome to observe our board meetings, normally held in Eckville on the fourth Monday of each month. Meetings start at 5:30 p.m. with a selection of delicious pizzas from Panago in Rocky Mountain House, so let me know ahead of time if you plan to join in so I can make sure that there is enough to go around.

Also, thanks to GWFA Secretary Deb Skeels for the heavy dose of cuteness during a visit with her daughter's newest crop of goat kids, born late in February. They are a lot of fun to watch—and very difficult to photograph as they scramble around their yard at breakneck speed, leaping into the air for no apparent reason and singing kid songs at the top of their itty bitty lungs. Awww . . .

Stay warm and pray for an easy transition into Spring.



Is your annual compensation review coming this year?

It is time to start planning.

I can help. Give me a call.



## Caring for Cows in the Aftermath of a Cold Winter

*Reprinted from Agri-News, a weekly publication of Alberta Agriculture and Forestry.*

Animals that are kept outside – be they cattle, bison or horses – they all increase the amount of feed they consume during the cold weather, says Barry Yaremicio, beef and forage specialist with the Alberta Ag Info Centre.

This is to increase the amount of heat that is generated during the digestion process to stay warm. Using beef cattle as an example, if temperatures drop below -20 C, feed intake can increase by five to 30 per cent, compared to a warmer day.

Because of the cold, Yaremicio says that some producers are noticing that their haystacks or silage pits are emptying a lot faster than what was expected. However, he says producers have some options even on limited feed supply.

Cows in late pregnancy can be fed a certain amount of straw per day, which is no different than before the cold weather.

However, the straw cannot be the total increase in feed supplied because it is low in protein and high in fibre, which reduces digestibility and rumen efficiency. Good quality hay and additional grain is needed as part of the additional feed supplied. Adding two pounds of grain per head per day at -30C and four pounds of additional grain at -40C is a good starting point.

Managing the protein content, calcium and phosphorus, magnesium, trace minerals and vitamins are all important to provide a balanced ration. If hay or silage supplies are very short, feeding roughly 10 pounds of straw per day to a lactating cow with the remainder being silage or hay along with at 10 to 15 pounds – or more – of grain per head per day may be necessary. Grain feeding rates will depend on the quality of the other feeds and forages.

Yaremicio says that after calving, when including straw in the diet, it is critical to include sufficient amounts of protein. The ration should contain a minimum of 11 per cent protein on a dry matter basis. Adding faba beans, peas, distillers grains or 32 per cent with Rumensin are all possibilities.

Changing and adjusting the feeding program when including lower quality straw is critical. It is possible that calcium and magnesium levels will be low, creating a concern with downer cows or milk fevers.

He adds to keep eye on the animal's body condition score. When a cow loses body condition score prior to calving, the energy availability the cow to produce milk after calving is reduced because there is less fat to mobilize off her back in addition to the feed that is providing them with energy.

If the cow can't mobilize the extra fat to get energy to produce milk, peak milk production is going to go down. If you lose two pounds of milk production off the peak at eight weeks after calving, your loss of milk production over the entire length of that lactation period is going to be down that two pounds. It is not just the peak that is lost, but the two pounds all the way through.

If cows are losing weight between calving and when the bulls are turned out, it takes longer for the cows to start cycling and first service conception rates go down, says Yaremicio.

Therefore, you are either going to have a bunch of calves born later in the calving season next year, or that cow might be open and gets culled.

He says that bringing the cows back into condition will take a little more attention to details. Get some extra help working through current rations. Or, use the CowBytes program and readjust them as soon as possible to allow the largest amount of time to regain condition before the breeding season begins.

Feeding an extra two, three or four pounds of grain a day over above what is fed in warmer conditions is a starting point. The extra grain will help increase weight gains by about one-half to three-quarters of a pound a day. That is over and above fetal and placenta growth for cows in late pregnancy and some weight gain for lactating cows.



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## Seeking Solutions for Soil Health

By Greg Paranych, Ag Field Specialist



*“For every complex problem there is an answer that is Clear, Simple, and Wrong.”*

(H.L. Mencken)

It seems that as we continually seek solutions to the many challenges in agriculture, those simple “silver bullet” solutions seem to evade us. This is so true as we grapple with the efforts to improve our soil’s condition. The term “soil health” has become the latest and hottest buzz phrase in agriculture lately. It conjures up a lot of different images and perceptions as to what that is all about.

In this article let me give you my spin on things.

First of all, when we say, “soil health”, what does that mean?

The

best description I’ve heard is that it is “the continuous capacity of a soil to function as a living ecosystem.” The four primary principles of Soil Health are:

- Maximize continuous living roots via permanent cover, forage biomass, cover crops,
- Minimize disturbance through permanent cover, 0-till cropping, minimum tillage,
- Maximize soil cover by maintaining crop residue, crop cover contributing to cooler soil surface temperature.,
- Maximize biodiversity achieved with rotational/managed grazing, integrated pest management, crop mix selection, pollinator planting.

All together, these principles contribute to creating a vibrant micro-organism environment. Consider that on one hectare of healthy soil, the top 15 centimetres contains about 20 tonnes of micro-organisms. That’s equal to more than 20 cows!

One of the paths toward improving soil health is the increasing interest and use of cover crops. You may ask, why would someone grow cover crops? The reasons can vary depending the many benefits, reasons or needs of each individual farm or ranch operation. Here are the most common ones cited:

- Reduced erosion,
- Increased soil Organic Matter (OM) and structure,
- Conserve soil moisture,
- Improve soil water infiltration,
- Capture nutrients (nitrogen fixation, nutrient scavenging),
- Suppress weeds/pests (especially in organic operations),
- Reduced soil compaction (trafficability),
- Livestock feed sources/bee forage,
- Increased crop Yield over time,
- Reduce year over year variability.

These are all very good benefits and goals individually, and even more impressive when combined for cumulative results in soil improvement, or soil health.

The rational for including cover crops into an operation involves:

- Having plants grow in typical non-growth periods (between conventional crops),
- Capture new feed opportunities,
- Capture sunlight to feed microbes, capture Carbon (C), trap and recycle nutrients,
- Make better use of limited resources and time available,
- Hve plants that will self terminate (winter kill).

If you are going to consider using cover crops in your operation, you must develop a cover crop plan. Cover crops are part of an

overall system. They must be adapted within a grower’s operation via cropping practices, rotational fit, tillage management, nutrient program, pest and manure management. It is a sharp learning curve as you do the homework to find out what is the main purpose of cover crops for your farm. You will need to decide on the selection of cover crop species that will match your management style for cropping and tillage systems. How available are your resources of time windows, equipment, seeding options/limitations?

Other factors include your soil type(s), climate, drought risk, manure use, herbicide carryover, and certainly several local or personal considerations.

As you can realize, the pathway and solutions toward better soil health may not necessarily be simple, clear and have the potential to be wrong if we don’t fully understand many of the factors that will give us success or failure.

How do I start? I suggest starting slow and focussed. Identify what your management and resource limitations are and what you are willing to change to accommodate a cover crop program.

Consider your climate and soil compatibility with various cover crop species. The annual cover crops can be considered in three primary groups, each bringing specific roles to the cover crop toolbox. They are grasses, legumes, brassicas and varied mixtures of all of these.

Define your primary focus for your soil(s). Is it soil organic matter (grasses), soil nutrients (legumes) or soil penetration (brassicas)? Are you looking for a return with additional livestock feed (grass/legume mixtures) or soil structural changes (legume/brassica mixtures)?

In the next issue, I will discuss the function and benefits of several of the different cover crop species in more detail. I will also cover some practical combinations and rotations that could be reasonable starting points for many producers. Let’s work together to seek the best soil health solutions for your land.

I will leave you with one of my favourite quotes by a former grain trader, Don Bousquet, “If you enter something new blind, you could come out naked.”



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## Snowmobiles, Rivers, ALUS and Green Acreages...What's the Connection?

By Ken Lewis, Red Deer County conservation co-ordinator



Snowmobiling (or any ATV-ing) along a river, stream, lake or pond in Red Deer County is an enjoyable activity for many people every winter.

While cruising along, it might be tempting to leave the ice and ride the banks or the land beyond.

Simply put: Please don't.

Why not, you ask? Two reasons:

You might be breaking the law or trespassing.

For the most part, the "bed and shore" of a permanent water body like a creek, river, pond or lake are public land. But that's it.

So what's the bed and shore? Alberta's Surveys Act defines it like this: "...the bed and shore of a body of water shall be the land covered so long by water as to wrest it from vegetation or as to mark a distinct character on the vegetation where it extends into the water or on the soil itself."

Unless you're a surveyor, or maybe a lawyer also trained in botany and soil hydrology, you probably won't be able to find that property line, especially when there's snow everywhere and you're zipping along on your machine.

If you leave the ice, you are likely trespassing.

If you stay on the ice, you aren't trespassing.

Nobody wants to be a trespasser.

Many, many farmers, ranchers and acreage owners across Red Deer County are investing a lot of their time, money and hard work into doing things to benefit the environment on their farms, ranches and acreages.

In a lot of cases, there's also significant third-party investments being made in these actions, through programs like the County's ALUS Program and Green Acreages Program.

Land beside rivers, lakes, streams and ponds (called "riparian areas") is often where this great work is happening. A "quick rip" on a snowmobile or an ATV through a riparian area can instantly undo years and thousands of dollars of work, causing serious damage to the environment.

If you leave the ice, you are likely going to cause some kind of environmental damage. If you stay on the ice, you won't.

Nobody wants to wreck the environment or other's hard work.

It's also very important to understand that when a landowner participates in a program like ALUS or Green Acreages, his or her land is still private land.

You can't access it without the landowner's permission. And when you ask, the landowner can say "no".

If you'd like to find out more about water boundaries, please visit: [www.alberta.ca/water-boundaries.aspx](http://www.alberta.ca/water-boundaries.aspx).

To find out about the ALUS Program or the Green Acreages Program and how you could access funding to do projects on your land that help the environment, please visit [www.rdcountry.ca/207/Conservation](http://www.rdcountry.ca/207/Conservation) or contact me at 403-505-9038 or [klewis@rdcounty.ca](mailto:klewis@rdcounty.ca)



Red Deer County Farmers and Ranchers are invited to join us for FREE Online Environmental Farm Plan (EFP) Workshops.

This is a chance to start, complete or update your EFP.

**Date:** Second Thursday of each Month

**Time:** 10 – 2pm

**Where:** Red Deer County – Council Chambers

**Cost:** FREE – Lunch Included

**Note:** Please bring a laptop as this is an Online EFP Workshop (via internet).

**For More Information and to Register:** Contact Agriculture Services at 403.342.8654 or [agriculture@rdcounty.ca](mailto:agriculture@rdcounty.ca)

**Registration Deadline:** First Thursday of each month

For more information on Environmental Farm Plans, visit [www.albertaefp.com](http://www.albertaefp.com)



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# Grey Wooded Forage Association

*Creating an Awareness of Forages*

## 2019/20 Membership Application Form

**Membership in the GWFA is open to anyone interested in forage production, grazing management and environment sustainability**

**The fee is \$40 per year, running from April 1 to March 31  
For information, call 403-844-2645 or email [gwfa3@telus.net](mailto:gwfa3@telus.net)**

### Benefits of joining GWFA:

- ◆ Discounts on courses, seminars, workshops and tours.
- ◆ An automatic subscription to *The Blade*, published monthly online. Hard copy is available on request.
- ◆ Assistance with your Environmental Farm Plan.
- ◆ Equipment rental (deposit required).
- ◆ Access to our reference library.
- ◆ Access to our members-only Facebook group.
- ◆ Networking with like-minded producers and advisors.
- ◆ Farm consultation services (farm calls are 55 cents per kilometre, each way).
- ◆ A copy of the GWFA Annual Report.

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**Please mail your completed form and cheque to:**

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**\*How do you describe your operation (tick all that apply)**

- ☐ Beef producer  
☐ Sheep/goat\ producer  
☐ Dairy producer  
☐ Annual crops producer  
☐ Forage producer  
☐ Other \_\_\_\_\_

**\*How many head of livestock do you manage:**

Beef cows/heifers \_\_\_\_\_  
Dairy cows \_\_\_\_\_  
Feeders \_\_\_\_\_  
Ewes \_\_\_\_\_  
Does \_\_\_\_\_  
Other \_\_\_\_\_

**\*How many acres of land do you manage:**

Pasture \_\_\_\_\_  
Hay \_\_\_\_\_  
Crop \_\_\_\_\_  
Other \_\_\_\_\_

*\*These questions are voluntary.  
We do not share your information*

How can we improve our service to you?  
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Please suggest topics you would like to learn more about:  
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