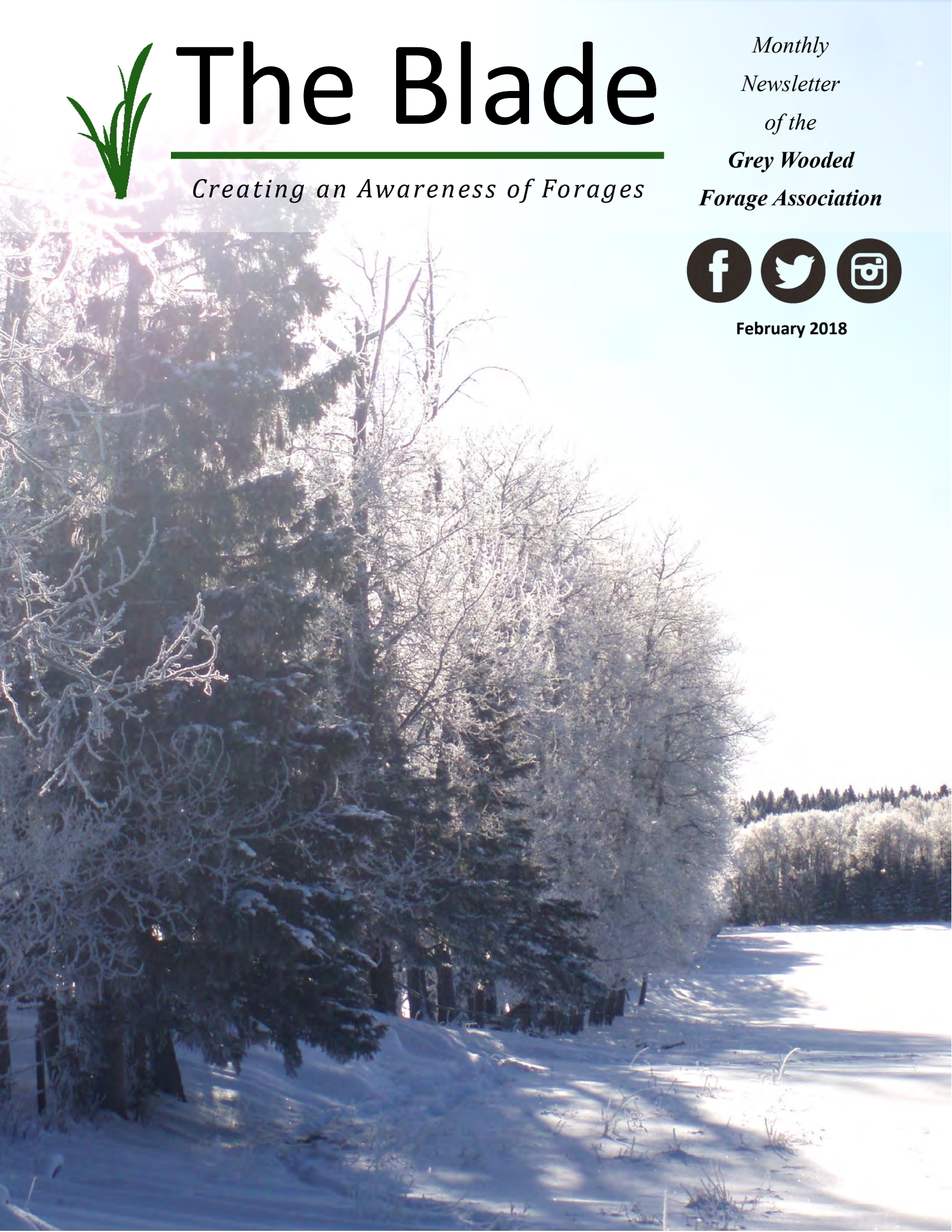
The Blade

Creating an Awareness of Forages

Monthly Newsletter of the ***Grey Wooded Forage Association***

February 2018



Message from the Chair

Amy Leitch

Welcome to the year of 2018. One, where so far, taking a deep breath may create frost icicles in your lungs or the need for ice Crampons on your chore boots. As a famous Super Hero would say "onwards and upwards to greater glory", which is a great moto not only for the temperature and solar hours but for all producers and stewards of the land.

For myself, January was a flurry of business. Animals, marketing, finalizing some planning and attending an engaging and exciting 2-day course on "Take this Farm and Love It"! This event had a speaker I was extremely excited to hear, just like Christmas morning. This may sound a little childish, but when you enjoy something it should give you a carbonating feeling inside. GRO – Gateway Research Organization and West Central Forage Association, hosted Joel Salatin and Alberta's own Steve Kenyon for a Stockman Grass Farmer Business School. Well, my spark for Agriculture Business has been fanned into a flame for sure. Those 2 Agricultural exciters have so many take home messages and practical information for all business people. The value of the 2-day seminar filled my notebook and brain folds. I have come back with a flurry of strategic plans for my business and family and how it will encompass my children and be easily transferred to them. Yes, that is right, I left that course with a positive experience on Farm Transition. The crowd of people who were there where from all over three different Provinces. The conversations, connections and shared experiences that were made are invaluable. I am very excited, almost bubbling about the next time the Stockman Grass Farmer brings an event back to Alberta. It is very true, that no matter what, we can all use a little recharge in our fields of desire, whether that is Grass, Meat, Dirt, Water and so on. This is a coincidental time of year for a recharge, but I encourage all of you to take in a seminar or event in 2018, that will help to give you the boost of desire to continue to succeed in your business. Keep your eyes on the Blade and our email updates to many of the Agricultural Business Recharge Events/Seminars in our Area.

There are a few other Agriculture exciters as I would call them, I would recommend you check them out online or via their publications, John Suscovich and Justin Rhodes. These are just two of the many whose passion to farm isn't just about themselves but about exciting everyone who is or wants to start farming.

The GWFA is brainstorming together some of these exciters to potentially have an event in the near future. If you have any suggestions as to who you as a producer would like to see, hear or be part of a session with GWFA, please let us know at the office, via phone or email, 403 844 2645 gwfa3@telus.net or gwfa5@telus.net.

Best wishes from myself and the GWFA Board members in the year of 2018 ahead of us, lets all create a carbonating effect for Agriculture.

The Blade is a monthly publication produced by The Grey Wooded Forage Association

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GWFA Mission Statement

To promote environmentally and economically sustainable forage and agricultural practices.

GWFA Vision Statement

The community is engaged in regenerative agricultural production methods.

The Grey Wooded Forage Association is a member of ARECA

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Alberta

In This Issue:

Managers Note

Hey folks,

The Red Bow Agricultural Partnership is a municipal collaboration created with the purpose of sharing resources, information, knowledge and facilitating networking opportunities for the benefit of sustainable agriculture within the rural communities in which they operate. The current partnership consists of M.D. of Bighorn, Clearwater County, Kneehill County, Mountain View County, Red Deer County, Rocky View County and Wheatland County. Since 2007 the committee has hosted two annual events: Ladies Livestock Lessons and Ranching Opportunities.

Ladies Livestock Lessons is a workshop designed specifically for women in the ranching industry. This workshop includes indoor classroom time, outdoor hands-on sessions and lots of socializing and networking. This project is hosted by a subcommittee consisting of M.D. of Bighorn, Kneehill County, Mountain View County, Rocky View County and Wheatland County as well as partners Cows & Fish, Foothills Forage and Grazing Association and Grey Wooded Forage Association.

Over 120 participants attended Ladies Livestock Lessons workshop in Acme on January 20th. It was a day full of presentations, but some of the more notable ones were; Passing The Torch-Succession Planning by Shawna Feth, Canadian Round Table for Sustainable Beef by Fawn Jackson, Bovine Calving Management by Dr. Gord Krebs, and the Calving Clinic by Dr. Gord Krebs, Dr. Lisa Misener, and Chantal DeBeurs. The planning committee brought in Lucy, a full-size calving model along with two table top models, to provide an opportunity for attendees to experience and practise delivering a calf and learn how to use a calf puller and chains. An excellent day! Congrats to the committee for an excellent job done. If anyone is interested in attending a future workshop, please be sure to contact me. We will begin planning for next year soon.

Our fiscal year end is fast approaching, and it is time again for membership renewals. At our AGM last year, a member resolution was passed to increase the membership fee to $40.00. Our fiscal year is April 1st to March 31st. I have sent a membership renewal reminder via email a few weeks ago. Please ensure your membership fees are up to date; to reduce cost we will not be invoicing. We accept e-transfers to my email address gwfa3@telus.net, checks or cash.

Our AGM date has been set for Friday May 11th at the Dover Court Hall. Please mark your calendars. We are currently in the planning stages and are happy to entertain ideas from our membership. We will start with the business meeting at 5:00pm, supper around 6 and activities to follow.

We need to replace 4 board members this year and are seeking some help from our membership to identify possible candidates to fill these positions. A write up with be inserted in this publication outlining the roles and responsibilities of the position.

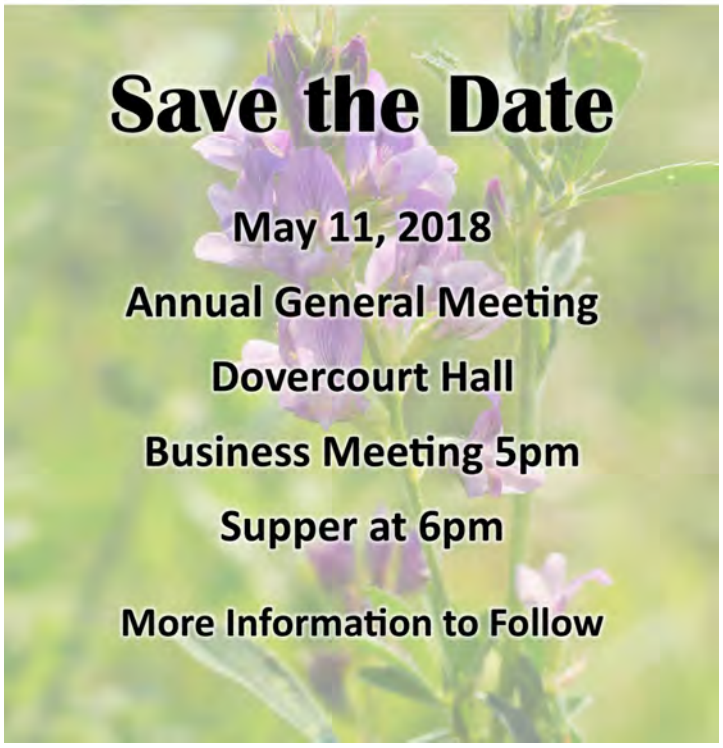
GWFA is also seeking one member to replace one of our annual auditors. Training will be provided by the existing auditors. This position requires a commitment of 3-4 hours once per year and the only requirement is that you are familiar with excel. If you are interested in the position or know of someone who could fill this position be sure to contact us.

There have been some major changes to the Alberta EFP program. Be sure to get familiar with the new renewal period, see our article in this month's publication.

Ginette

Grey Wooded Forage Association

Creating an Awareness of Forages



Classified Ad:

I have approximately 150 hay bales for sale weighing about 1150# each. they consist of mainly orchard grass, timothy and brome. I want $60 a bale, I will load. Please call 403-357-9831 if you're interested.

An 'Annual' Discussion

Devin Knopp, PAg

Recently, I had an interesting discussion with a former colleague/producer friend of mine. He and I talk on a relatively frequent basis about anything and everything from perennial forages to annual crops and the four legged and sometimes two legged creatures that eat them.

The last conversation we had, we were talking about using fall seeded winter annuals for spring stockpiled pasture. This isn't a new concept, it is one that has been around since biennials were planted for forage. Traditionally, producers would use fall rye or winter triticale as their preferred annual. Graze it in the fall if there was enough top growth, if not, then wait until spring and use it as early stockpiled pasture.

As we talked about using annuals we both questioned why there was still so much seasonal fallow occurring. In other words, we plant an annual in May and maybe silage it or take it to grain. However, there is a time between harvest and freeze-up where fallow takes place. This period the land is completely unproductive. Since the land is unproductive, there begins to be a die off of soil microflora, especially after aggressive tillage. These microbial species are essential to the soil in helping breakdown organic matter into carbon and plant usable nutrients. Without live plants present, many of the beneficial species like mycorrhizal fungi begin to die off because there is no host to perform its half of the symbiotic relationship. I'll get off my soapbox there because that's a discussion for another day.

That led our conversation to the idea of why aren't we using the concept of crop rotation not only from a disease perspective, but from a plant nutrition, animal nutrition, and soil health perspective. Using the crop rotation concept to maintain permanent cover on ground traditionally used for a single annual crop. This way, we can have multiple different types of crop both used for grazing and annual forage production. As an example, we talked about planting fall rye or winter triticale in around the 15th of August. That would normally correspond with the silaging date of a barley crop planted mid to late May. Now, from the 15th of August, we can begin to see frost especially west of the highway 2 corridor. However, the odds of the killing frost at that time are still relatively low. The odds are greater we will have relatively decent growing conditions for another month and a half. That 45 days should be enough to get a winter triticale or fall rye enough time to get up out of the ground and get hardened off before we get continuous freezing temperatures, that is if they are planted as a single monocrop.

So, in our theoretical conversation the winter annual established and there is ground cover going into winter. That spring there are now plants ready to begin growing well ahead of any weed species and already at a point where in a few short weeks of growth they'll be ready for a graze. How nice would it be to turn cows out into pasture the early part of May, three weeks earlier than you would your perennial pastures. The nice part, because they are a winter annual you have flexibility with what you as a producer would do. Grazing the winter annual extremely hard can be an option, as you may decide to terminate that crop early. You may also wish to incorporate it into your rotation for grazing or let it go to maturity and either take it as green feed, silage, or grain, depending on your crop. Wouldn't it be nice to have cows out early and options based upon the spring for the direction you want to take that winter annual. Not to mention your not feeding cattle for 3 weeks, or put it this way you've now added 3 weeks to your grazing season on the front end. That usually isn't an option. If we get good growing conditions and a mild fall we can graze longer into the end of the season. Grazing early has detrimental effects on our perennial pastures and can decreases overall productivity in the long run by as much as 60%.

The other part of crop rotation comes in when you terminate the annual after grazing or by mid June as a greenfeed, you now have enough time to plant another crop. Maybe you go back in with another annual cereal. However, a true crop rotation means you switch species. So, now maybe we look at a forage brassica mix or put it back into perennials. That will change the plant species, affect the microbial species in the soil and change our nutrition for our grazing cattle. Planting forage brassicas by mid June even early July will give ample time for growth and multiple grazing before it winter kills. Since these plants regrow at a very rapid rate, they can be taken into the fall and used in your late fall stockpile graze or used in a swath grazing regime. To think a piece of land could be used for two different types of annuals and multiple different uses, brings a very different nutritional profile to the cattle grazing and the soil microbes below. It also ensures there is some crop rotation to reduce disease risk in areas where cereal crops are very dominant.

I didn't mention any costs, though that is something a producer must always consider. That is because this is a concept not a hard management practice. It also may not be an option for every producer every year depending on how the growing season has gone.

Continued from previous page

Cost is very important to consider, but I look at our discussion as more about a concept, theory, and change away from the norm. As we move around the province the ability for annual species to grow changes, and there is a lot of exciting plant breeding that is making more winter hardy or frost tolerant annual species available every year.

Using more annuals in forage production is something I've thought more about. Land sitting bare is doing nothing toward my bottom line. So, if I can generate more days on pasture, decrease the amount of winter feed I need, and provide solid ground cover to reduce erosion and feed the bugs that we know so very little about. Why not think about it?

3D Fencing Project Sponsors

Grey Wooded Forage Association

Creating an Awareness of Forages

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February 2nd, 2018

We are currently seeking four new Directors to join our board. This is a volunteer position. The role of the Board is to govern the organization. The Board of Directors is the legal authority for the association. As a member of the Board, a Director acts in a position of trust for the community and is responsible for the effective Governance of the organization. Governance is the act of establishing and monitoring the long-term direction of an organization through policy.

Below is a brief list of benefits and experience that we seek from potential board members

- Advocating for the association is a key role we need in a Director
- A positive attitude towards continued learning
- Enthusiastic supporters of our association
- Willingness to share experiences and grow
- Social interactions and networking with Industry representatives, GWFA members, staff and other board members at our events and meetings.
- Prospective board members who have a broader view of the community and the world are an asset
- Prospective board members are a formal link to the community and to the people that our organization serves.
- Your contribution will impact future generation in agriculture
- Opportunities to attend conferences, approve project, and personal development
- Assist in the development of quality projects and extension activities

For more information on our board positions, a job description, the roles and responsibilities and time commitment please contact us at 403-844-2645.

Amy Leitch,
Chair

Bench to Barn: A Glimpse into How New Technology is Developed and Delivered

Canada is one of the major international beef producers with over 2.7M beef cattle that contribute to the 317,000 tonnes and $2B of exported beef in 2017. Western Canada produces 78% of Canada's beef, making it a critical component of the agricultural sector and the rural economy. When dealing with numbers of this size, even small changes can have a large impact on the economic well-being of producers and our rural communities. That's why significant resources, financial and human, are being directed towards increasing the quality, profitability, and sustainability of the beef sector here in Alberta.

One on-going project between the University of Alberta's Livestock Gentec and Alberta Agriculture and Forestry (AAF) researchers at Agriculture and Agri-Food Canada's Lacombe Research Centre has already delivered a significant new tool that is expected to change the way commercial cow/calf producers select and manage their herds. Early indicators, including evaluations conducted on ranches within the Grey Wooded Forage Association's own geography, point to cost savings and revenue increases in the area of $150 per cow per year for producers, once fully implemented.

The project, a $4.5M initiative, was originally intended to develop genomic tools to improve feed efficiency (animals that cost less to feed for every kg of weight they accumulate) and carcass traits (such as weight, yield, and grade) in commercial cattle. These tools are both accurate and valuable in pure breed herds but less so in commercial herds due to the much larger variation of genetics as well as the range of feed, management, and climactic environments they are exposed to. The goal of this project was to accumulate the sheer quantity of data and methods of analyzing the data to enable these tools to be more predictive of commercial cattle and allow producers to manage their herds more profitably. In turn, this increased value to commercial producers would drive the adoption of genomics tools, further increasing the competitiveness and sustainability of Canadian beef. The original expectation was that, by building on the large national and international genomics databases, the project would improve beef industry profitability by $214 M over 15 years as more productive and efficient cattle were selected. Turns out this was a huge understatement.

In order to accomplish this aggressive objective, an international team of experts was assembled to address the scientific research aspects of the project with equal representation from the producers and producer organizations that the project was ultimately to benefit. Notable members of the collaboration that GWFA members are likely to recognize include Dr. John Basarab (AAF, Lacombe), Dr. John Crowley (Canadian Beef Breeds Council), Dr. Troy Drake (Cow/Calf Health Management Services), and Jennifer Stewart-Smith (Beefbooster). Additional collaborators included members from the Irish Cattle Breeding Federation, Teagasc (Ireland), and Livestock Gentec at the University of Alberta. The not-for-profit genomics service provider spun out of the University of Alberta, Delta Genomics, was also involved in the project – a role that expanded to include the commercialization (sale) and distribution of an unexpected gem that emerged as the project developed and data were collected.

As the data came in and were analyzed, a couple of items came to the attention of the team. Animals that had a more diverse set of genetics also seemed to have other characteristics, which led investigators to look more closely at the data (the range of animals, their genetics, and their demonstrated on-farm performance). From this, patterns began to emerge. It is well known that the greater the variation in an animal's genetics or heterozygosity – something that producers have typically referred to as "hybrid vigour" – the better her health, the longer she stayed in the herd, the more calves she produced, and the more pounds of weaned calves the producer had available for sale each year. Here, hybrid vigour was calculated genomically, increasing its accuracy and eliminating the errors that can occur even within disciplined pedigree protocols. New, however, was that these high vigour animals were also shown to, on average, have greater feed efficiency.

Validated information such as this can be of immense value to the commercial cow/calf producer through the ability to manage their herd and profitability by minimizing costs (replacement heifer and feed) while maximizing revenue through increases in pounds of weaned calves available for sale.

But to do this, producers needed a way to determine the genomic profile of both their herd and animals. This could be accomplished easily through genetic testing. A simple parentage test links a calf back to its sire while an analysis of the same sample can determine the degree of heterozygosity. This in turn can be used to calculate the breed composition of an animal. Genomically calculated breed composition allows producers to maximize hybrid vigour through selective matings while also allowing for the ability to capitalize on breed complementarity in balancing / developing economically important traits. Thus, the concept of the genomics tool, EnVigour HX™, was born; a genetic tool discovered, developed, validated, and launched based on the actual genetics, environment, and performance of Alberta's commercial cattle.

In the coming months with the GWFA, Livestock Gentec and Delta Genomics will be providing additional information and updates on the project's other objectives, and on the ways for commercial cow/calf producers to measure and realize the value of EnVigour HX™. If curiosity gets the better of you and you don't want to wait for the next installment, contact Delta Genomics or Livestock Gentec at any time for more information on how EnVigour HX™ might help you achieve your herd-vision.

You can contact us at envigourhx@deltagenomics.com or Michelle at (780) 492-2538.

Clearing Confusion In Perennial Crop Insurance Products

Mustafa Eric, AFSC Communications Coordinator

Perennial crop producers will have simplified coverage options without any potential loss of benefits when they insure their crops with Agriculture Financial Services Corporation (AFSC) from the beginning of 2018.

Under the program changes, both coverage and price options are being reduced in number, removing the complexity and making the selection of options less confusing. "The options that have been dropped off the program were the least utilized choices," said Ken Handford, Product Development Analyst at AFSC. "The vast majority of our clients have been selecting the options that have been kept in the program."

Handford believes the high number of available coverage and price options, in addition to the possible choice of up to three weather stations, were responsible for the complexity around the perennial insurance products. With the multiplicity of choices brought down to a rational few and any potential loss of benefits compared to the previous version ruled out, the hope is that clients will find it easier to renew their policies for perennial crops in 2018 with the new format of the insurance product. "AFSC understands the need to explain these changes to our clients and we will reach out to perennial insurance holders to provide them with information to help them make their choices on the new options," said Nancy Smith, Insurance Product Coordinator at AFSC.

What is new?

In **Hay Insurance, Moisture Deficiency Insurance and Satellite Yield Insurance** programs, the list of crops covered for insurance remains the same, but producers will have two Spring Price options to select from instead of four.

In **Moisture Deficiency Insurance (MDI)** program, all eight Full Season coverage options, including four with Spring Soil Moisture (SSM) component, are being dropped. Of the eight Split Season coverage options in 2017 program, four are left in 2018 program, all of them also dissociated from SSM.

However, the way payments are calculated for indemnities for claimants is not being changed; therefore, a client will be able to receive the greater amount of the Split Season or Full Season options as if the latter were still operational. The split season options that remain electable in the program may generate payments that are more than full season options, but they will never pay less. For example, when a client who has selected split season option becomes eligible for payment due to measured precipitation, calculations are made for each split season separately and added together for a total payment. However, despite the option having been dropped, a calculation will also be made using the corresponding weighting option for the full season indemnity. If the payment for the full season is higher than the combined split season payments, the client will receive the extra amount at the end of the season.

As for **Moisture Deficiency Endorsement,** the number of coverage options in this program has also been reduced from eight to four, with all four remaining also disconnected from the SSM. As a result, SSM values are to be excluded from calculations, which will now be based solely on the comparison of accumulated precipitation levels at selected weather stations with the long term normal in that area.

Staff at AFSC branch offices will be ready to discuss these and other details of the changes with clients who will be renewing their perennial insurance policies in 2018.

Unique Financial Services
AFSC
INSURANCE • LENDING • INCOME STABILIZATION

2018/2019 Membership are Due By: March 31, 2018

- At our 2017 AGM a member resolution was passed to increase the membership fee to $40.
- Please note $40 will cover the cost of mailing a paper copy of the Blade.
- Please see the updated membership form on the back page for member benefits and to fill out your membership renewal.
- GWFA accepts cash, cheque, and e-transfer. E-transfers can be sent to gwfa3@telus.net.

Winter Feeding of Bulls

Winter is the time to properly condition bulls for the coming spring and summer breeding season. Proper conditioning of bulls is important because bull fertility has a major impact in determining whether a cow will conceive and calve early or late in the calving season and thus influence calf weaning weight and uniformity. In addition, because of the high (1:25 to 1:50) bull:cow ratio used for natural service, the fertility of the herd bull is much more important than in any individual cow. Indeed, for the beef breeder, fertility of the bull is 5 and 10 times more important than growth performance and product quality, respectively.

Nutrition is the main factor, which influences "proper conditioning" of bulls and thus their fertility. How can we manage bulls so that they do not have impaired sex drive (libido) due to being either too fat or too thin? The target of the feeding program in winter is to allow the bulls to reach a moderate body condition score of 3 to 3.5 at breeding time (see Table 1).

Once the bull has passed the breeding evaluation, the feeding program to attain a body condition score of 3 to 3.5 involves knowing the rate of gain the bulls should achieve in order to achieve the desired mature weight. Table 2 details target weights and daily gains necessary for growing bulls to achieve their full breeding potential.

Diet recommendations for 500 to 1200 pound growing bulls and not finishing are designed to result in a growth rate of 3.0 to 3.5 lbs per day. The following are targets to aim for when balancing rations for growing bulls:

- Dry matter (DM) intake – 2.7% of bodyweight at 500 lbs; 2.5 % of body weight at 1200 lb.
- Energy – % Total Digestible Nutrients (TDN) – 67.5% to 68.5% (DM basis).
- Crude Protein – 13.5 % to 14 % (DM basis).
- Calcium – 0.55% (DM basis)
- Phosphorous – 0.40% (DM basis).
- Calcium to Phosphorous ratio – within the range of 2:1 and 7:1
- Ensure that all trace minerals are adequate and vitamins A D & E are adequate.

Use a good quality alfalfa-grass hay or cereal silage and coarse ground or rolled barley or whole oats for feeding growing bulls. A protein supplement may be required or 2 to 3 lbs of feed peas, or lentils may be used to supplement protein. Feed an ionophore such as Rumensin® in order to improve feed efficiency and to reduce the potential of bloat occurring. Feeding the grain/supplement mixture in two equal portions each day is another practice that producers can use to reduce the risk of bloat. The above growing ration recommendations should provide an excellent opportunity for development of the frame and muscle of growing bulls without fattening them.

Adequate nutrition is equally important for young bulls after the breeding season for continued growth development and lifetime breeding potential. After the breeding season the growth rate should be about 2 lbs per day depending on the condition of the bull. Winter feeding of bulls that are 2 or more years old at breeding should be geared to reach the optimum breeding condition when they are put with the cows. If you calve in January-February, supplementary winter feeding of thin bulls (score of 2 or less) for gains as in Table 2 may be necessary. On the other hand, if breeding to calve in April-May, it may be possible to winter feed the same bulls at nearer a maintenance level and depend on spring grass to bring up the condition by breeding time. Judgement on the exact level of winter feeding needed depends on the condition of the bull as he goes into the winter. Thus, if he is in moderate condition (score of 3 or more), you should feed for lower winter gains aimed to hold his condition so that he will not become too fat by breeding time.

There is no advantage to shoot for high rates of gain in growing bulls by feeding large amounts of grain. Do not coerce growing bulls to attain their maximum mature weight by overfeeding. Indeed, bulls that attain a moderate body condition score at the target weight for age for their breed have fewer breeding problems than bulls that have been over-fed and thus are too fat for their weight.

Table 1. The Condition Scoring System

Score 1:	The individual short ribs are fairly sharp to the touch and there is no fat around the tail head. The hip bones, tail head and ribs are visually prominent.
Score 2:	The short ribs can be identified individually when touched but feel rounded rather than sharp. There is some tissue cover around the tail head and over the hip bones and the flank. Individual ribs are no longer obvious.
Score 3:	The short ribs can only be felt with firm pressure. The areas on either side of the tail head now have a degree of fat cover, which can be easily felt.
Score 4:	Fat cover around the tail head is evident as slight "rounds" that are soft to the touch. The short ribs cannot be felt even with firm pressure, and folds of fat are beginning to develop over the ribs and thighs of the animal.
Score 5:	The bone structure is no longer noticeable and the animal has a "blocky" appearance. The tail head and hip bones are almost completely buried in fat and folds of fat are apparent over the ribs and thighs. The short ribs are completely covered by fat and the animal's mobility is impaired by the large amounts of fat.

Table 2. Target Weights and Daily Gains for Growing Bulls

	Target weights (lb)			Minimum daily gain (lb)	
Mature bull Weight in moderate Condition (lb)	**Weaning at 200 days of Age[1]**	**14 mos. For Breeding[2]**	**At 24 mos. Of Age[3]**	**Weaning To Breeding**	**Yearling To 24 Month**
1760	595	1100	1650	3.0	1.8
1980	615	1166	1760	3.0	2.0
2200	640	1232	1892	3.0-3.5	2.2
2420	630	1298	2024	3.5	2.4
2640	685	1364	2156	3.5	2.6

***1 Estimated as 26 to 34% of mature bull weight**
***2 Estimated as 52 to 62% of mature bull weight**
***3 Estimated as 82 to 94% of mature bull weight**

References : Animal Production in Canada, 1993.
Alberta Agriculture Beef Herd Reference Binder and Study Guide – 317, 1987
CowBytes© Ration Balancing program Help Notes on Feeding growing bulls by B. Doig , copyrighted 1999.

Alberta EFP is Instituting a Renewal Period

Effective April 1, 2018, producers will need to have an EFP completion letter dated within the last **10 years** to be considered current and eligible for cost-share funding with the Environmental Sustainability and Climate Change programs of the Canadian Agriculture Partnership (CAP). That means, for example, if you apply in September 1, 2018, your EFP will need to have been approved on or after September 1, 2008 to be considered for current funding.

I'm sure the first question you'll ask after reading the title is "Why?". There has been a movement to harmonize EFPs nationally to make EFPs more useful to sustainable sourcing programs, and Alberta is the only province without a renewal period; therefore, we are doing it to make EFPs useful to sustainable sourcing programs across Canada.

I'm sure the next question is "How often?". The Alberta EFP program has a Stakeholder Advisory Committee (an industry advisory group) that set the renewal period at 10 years. We are waiting to see if the renewal period becomes part of the harmonized national standard. If it does, we anticipate we will need to move the renewal period to 5 years or less in the future.

What does this mean for producers?

If you want to apply for Growing Forward/CAP grants, you will need a current EFP.

If a sustainable sourcing program requires it (e.g. the potato sustainability initiative), you will need a current EFP

If your completion letter is older than 10 years, you will need to do a new workbook and action plan.

If you cannot find your completion letter, you will need to start and complete a new EFP to be considered current, regardless of the completion date; unless your EFP is online.

Technicians **cannot** give out completion letters without doing a **full review** of a ***new*** EFP (both workbook and action plan).

Producers should use the online workbook! ~ Why?

The online workbook does many of the calculations for you and carries data forward to other parts of the online workbook where needed

Future renewals will be easier. The data are stored online on a secure virtual private server accessible only to ARECA staff entrusted to deliver the EFP Program.

When the next version change comes, your data will be migrated to the newest version, making updates easier and simpler.

If available, you should use your original binder as a reference for your EFP renewal. Producers who have done this have told us putting the paper version online takes a few hours

If you cannot renew online, then you need to complete a new binder of the latest version.

How do I Renew? You can register to be assigned a technician in your area by following this link: http://www.albertaefp.com/start-an-efp

Strategic Use of Vitamin A and E During a Shortage

Barry Yaremcio Beef/Forage Specialist, AB Ag Info Center, Stettler

On October 31, 2017 a fire occurred at the BASF factory in Germany. This plant produces nearly half of the global feed grade vitamin A and some of the vitamin E precursors in the world. The fire has contributed to an already tight supply of these two vitamins which impacts vitamin supplies available to feed companies.

Many major feed companies will be examining their inventory of vitamins available for use as a result of the global shortage. To stretch supplies some companies are reducing vitamin fortification levels in feed supplements. Bulk sale of powdered or crumbled and injectable vitamin A and D will be reduced or temporarily discontinued until supplies return to normal by mid-2018. The reduced vitamin levels meet regulations set out by the Canadian Feed Inspection Agency (Schedule 4).

There are certain times in the year when vitamin supplementation is required. During the summer, actively growing plants in hayland and pasture have high levels of Vitamins A and E precursors. These naturally occurring precursors convert to their active form and available form to the animal. The amount of vitamin supplied from the growing plants is more than adequate to meet requirements. When forages are cut for hay or grazed after plants have gone dormant, the vitamin precursors oxidize and the potency or availability of the vitamins decline over time. When hay is cut or the forages are dormant for six months, a majority of the vitamin precursors have lost their activity and do not supply adequate amounts of vitamins to meet animal needs. Two year old hay cannot be expected to have any vitamin precursors remaining. The ensiling process for either bagged or chopped silage destroys the vitamin precursors in the forage and should be considered to supply minimal amounts to the ration. It is when these preserved and stored feeds are being used that supplemental Vitamin A, D, and E should be added to diets to avoid deficiency disease symptoms. Effects of not feeding vitamins will be discussed later in this article.

Vitamin A can be stored in the liver for use over a 3 to 4 month period. Vitamin E is only for 2- 4 weeks. Therefore it will take a shorter period of time for the animal to become Vitamin E deficient. It is best to supply vitamins as required on a regular basis. Injectable vitamins have a high availability for the first week or two after injection but levels quickly drop in the body and even though some level of vitamins are available for the period indicated on the label, may not be sufficient to meet requirements after the initial peak has passed. There is no injectable Vitamin E product registered for use in Canada.

A thin animal has less body fat as a percentage of body weight compared to an animal in good condition. Vitamins are stored primarily in the liver, but some is stored in body fat. Therefore, a thin animal has less storage capacity. This may result in an animal becoming deficient sooner.

Size and age of the animal and production (i.e. stage of pregnancy, bulls during breeding season, stage of lactation, etc.) Requirements vary with use and deficiency risk (i.e. needing to release enough vitamin A and E in milk to meet nursing calf requirements.

Variable weather patterns last year (precipitation – either a lack of or excess, temperature, and sunlight intensity) may have had an impact on the formation and storage life of precursor in forages and hay. Any stress factor that reduces the plant efficiency could reduce precursor formation. These levels could also be reduced due to late cutting or other harvest problems.

Vitamin E is transferred to the colostrum 4 to 8 weeks prior to calving and is only transferred to the calf by colostrum. Therefore, females in late pregnancy require higher levels of vitamins A and E approximately eight weeks before calving and for the first 3 to 4 months of lactation or until calves are eating significant amounts of growing forage. Vitamin E has less storage capacity in the animal. It can be expected that deficiency symptoms or reduce performance can be expected sooner with Vitamin E than Vitamin A.

If vitamin supplies are deficient or is suspected to be deficient, it is recommended to start vitamin feeding programs as soon as possible. Supplementation should continue until animals are turned out onto green grass. Vitamin requirements are higher for breeding cattle to maintain milk levels for calves and avoid reproductive failure.

High risk animals are those that grazed dry or dormant grass since last July and have received a silage based or straw-grain ration after coming off pasture as well as animals on hay or greenfeed harvested last summer and produced under the same stress conditions. In addition; no supplemental vitamins have been provided to date; calving is to start within a few weeks and breeding season starts well before the animals are turned onto fresh grass. Under these conditions, body stores of vitamins have been depleted.

It is possible for calves to be born dead. Calves born alive are likely to have greater health risks such as white muscle disease or higher rates of infectious diseases such as scours or pneumonia as a result of poor immunity. A lack of vitamins will persist until calves start consuming substantial fresh forage (3-4 months of age). Cows are at risk of poor conception rates due to reduced fertility for either cows or bulls at the start of the breeding season prior to turnout on fresh grass.

Medium risk animals are those that grazed forages that went dormant in September and have received medium to marginal quality forage after coming off pasture. Animals on swath grazing or grazing corn for the majority of the winter are in the same situation. Animals may have some reserves to draw on. Vitamin supplementation should start a minimum of 4 to 8 weeks prior to calving. Calving starts 4 to 6 weeks prior to turnout on grass and breeding

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season starts one month after turnout to grass.

Low risk animals are those that have been fed appropriate amounts of vitamins since fall and are in good body condition. As an example: backgrounding steers in good condition that had been receiving adequate levels of vitamins in the diet or supplement and have been well vaccinated and will be returning to spring pasture. Non-breeding animals have lower requirements than breeding animals.

In the short term vitamin deficiencies in individual animals over the next 3-6 months may not be noticeable, especially for herds that have been provided vitamins and minerals as part of a balanced diet to date. These herds are unlikely to experience effects of a Vitamin A deficiency and may be at some risk of a Vitamin E deficiency due a more rapid metabolism and shorter storage duration in body tissues. Herds that start calving in March or April may experience more problems because the vitamin content in the mineral products have been reduced because of the shortage.

Vitamin deficiencies may result in small changes in performance over the short run. Lower milk production, reduced average daily gain and a slight increase in open cow rates which are difficult to notice. If deficiencies continue, the losses in performance and in livestock deaths become more severe. It is possible to have a serious problem if body vitamin stores are depleted and the situation is not corrected. Even though products have increased in price, it is prudent to continue feeding vitamins.

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What We Like to do When Winter Comes…

Lloyd Quantz, Greenedge Precision Fencing

Best part about a wintertime Ag conference and tradeshow is that we get to stay warm and talk about cows, grass, soil, fences, water and how to make it all work together next year! We had the opportunity to do this at the December 2017 ***Western Canada Soil and Grazing conference*** in Edmonton. Without question producer interest in the topics was huge - selling out the available 500 seats weeks before the conference began!! To this packed house, the presenters reminded everyone how managing the livestock-grazing-solar energy-soil life triangle made a huge difference in soil biology, plant health, animal productivity and long-term sustainability. Several speakers who had been promoting or practicing regenerative soil management for decades using cover-crops and managed-interval grazing showed how organic matter in their soils had doubled, tripled or more and how purchased input expenses were nearly zero and moisture absorption was improved dramatically. This sounds almost idealistic and several speakers cautioned it takes commitment and time to realize the gains. And, it depends where you're starting from.

One keynoter – Gabe Brown from Bismark, North Dakota has been on this path for a couple decades now. I had first heard him in 2007 at Bismark and made note that he was either the wildest guy on wheels or (hopefully) he was the direction of the future. Turns out his regenerative farming practices have yielded good results and he is showing many others how to get to a future of high soil-carbon absorption in grazing and cover-crop systems. His focus is on maintaining soil health through continuously ensuring living plants can capture the sun's energy to enable carbs to reach soil micro-flora and fauna, so they sustain their work. This results in a vibrant and productive soil food-web that provides the nutrients and moisture gathering system for the crop on top. His most valuable tool is nothing more than a short-handled spade which he is continually using to dig into pastures and fields to see how well his favorite soil tillers are doing – earthworm heaven would describe his place. Turns out that earthworms know best how to create and benefit from the enhanced soil life and organic matter leading to huge increases in moisture retention.

Other presenters reinforced his ideas with science and personal experience. But, in the conference session breaks we all talked 'shop' – and how to build the better "mousetrap" to handle the many new challenges in livestock grazing management. Fencing, as expected, was a big topic for visitors to our Greenedge Fencing display. And, the diversity of opinions was very evident. Some preferred using a single hot wire everywhere and claimed to have cows trained to respect these. Others had old barbed fences to which they offset a single hot, smooth wire then tee'd off with polywire for temporary paddock divisions. Many showed interest in a better "mousetrap".

The Greenedge Precision Fencing recommended starting point is a good 3-5 multi-wire, hi-tensile ***perimeter*** fence with alternating hot and return-ground wires and ample extra grounding at every opportunity along the fenceline. This gives a solid long-term base structure which can then be divided into temporary, internal grazing paddocks summer and winter using flexible poly wire rolls and step in posts. Best of all, these perimeter fences are fully legal and effective for all classes of domestic animals and even serve as deterrent fences for larger wild game and notable predators. They help make good neighbors as well.

While the "how to" may call for different fencing options and opinions, there remains a great deal of confusion over the meaning of 'grazing rotations' and the Why? of grazing management. Some livestock owners claim to be rotating their grazing by leaving the herd on each piece until it is all grazed off and the animals are hungry then moving on to the next piece. Typically these grazing periods were calibrated in weeks not days. STOP THE PRESS!! This is not what we are talking about as advanced, beneficial grazing. Call it MIG, AMP, Savory or any derivative, *regenerative soil management* through grazing is a planet away from this abusive forage harvesting model which curtails plant growth if not eventually causing desertification or many acres of unproductive brush intrusion.

Short rotations of grazing with extended forage rest periods (a month or longer) can be effective and beneficial. But the key is to time the grazing to match the optimal leaf, solar-gathering ability. This means leaving (think leaf-ing!) the plants with enough leaf area to maximize solar insolation (absorption) but not allowing the plants to mature to their genetically-programed, dormancy stage. This means adjusting the grazing pressure by season, moisture availability, species of plants and heat-units.

And, for what ails our soils today some of these practices are a must. Too many of our fields and pastures are hard, compacted areas where little root and soil respiration and growth activity is taking place. Water, air, plant roots and soil micro-organisms cannot penetrate these pastures. The best of nature's work is evident in the deep, productive, carbon-rich soils on the prairies - the legacy of the buffalo which practiced managed interval-grazing with extended rest periods. Over the millennia this foraging/grazing pattern proved very productive and is directly proportional to the Sun's energy absorption by adolescent plant leaves and carbon fixing by soil microflora and fauna. Truly one of the most amazing solar energy projects in the universe so far as we know.

Moving into an enhanced grazing system requires some time and commitment but the payoff is generational sustainability and productive, carbon-rich soils nourishing high-quality, healthy grazers and better food for all!! 'Til we meet along the trail, Wishing each a Happy, Productive New Year.

LQ-1-2018

Grey Wooded Forage Association

2018/2019 Memberships

Memberships are $40.00 and run from April 1, 2018 to March 31, 2019.

Memberships are open to anyone interested in forage production, grazing management and environmental sustainability.

For information call 403-844-2645

Member Benefits:

- Receive discounts on courses, seminars, workshops, and tours
- Receive The Blade
- Receive Environmental Farm Plan delivery
- Free Equipment Rental (deposit required)
- Access to the GWFA library
- Access to our Member Facebook Group
- A chance to network with like minded producers
- Free Farm consultation service (phone, email, and in person in the office)
    - On-site farm calls are $0.55/km travel each way
- Receive an Annual Report

Please fill out and mail the portion below with a cheque for $40 or e-transfer to gwfa3@telus.net

Grey Wooded Forage Association
Box 1448, Rocky Mtn House, AB, T4T 1B1
403-844-2645

Renewal_____ or New Member_____

Name/Company Name:_____

Address:_____

Town/City:_____

Province & Postal Code:_____

The Blade: Email____ Canada Post ____

Phone:_____

Mobile Phone:_____

Email:_____

Please print clearly

How would you describe your occupation

- Forage Producer
- Beef Producer
- Sheep Producer
- Goat Producer
- Dairy Producer
- Annual Crops
- Other _____

How many head of livestock are you managing?

Beef Cows/Heifers:_____
Dairy Cows:_____
Feeders:_____
Ewes:_____
Does:_____
Other:_____

How many acres are you managing?

Pasture:_____
Hay:_____
Crop:_____
Other:_____

What topics are you interested in learning more about?_____

_____

How can GWFA better serve you?_____

_____

_____